

IX. *Additions to the Carabideous fauna of Mexico, with remarks on some of the species previously recorded.*
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[Read February 4th, 1891.]

PLATES XIII. & XIV.

THE present paper is in continuation of that read last year to the Society on the subject of the *Cicindelidæ* of Mexico, and has the object of making known the additions to the *Carabidæ* of the Mexican fauna that have been received by Messrs. Godman and Salvin, or have otherwise come to our knowledge, since the publication of vol. i., part 1, of the 'Biologia Centrali-Americana,' in 1884. In that work the number of species of *Carabidæ* recorded from Mexico was 650. The additions in the following pages bring the total up to 744, there being 93 species, of which 70 are described as new, and 23 new to Mexico, but previously described chiefly from North America. Seven previously known genera, *Micrixys*, *Dercylus*, *Pangus*, *Cratacanthus*, *Agonoderus*, *Pristodactyla*, and *Pogonus*, and one new genus, *Xenodromius*, are added to the Mexican list. Some notes are added in elucidation of certain species included in the original work in the 'Biologia,' rendered necessary by the results of the examination of much ampler material than was formerly available. Precise localities are now known for several species, which previously had been recorded only as from "Mexico."

Calosoma viridisulcatum, Chaud.

Specimens of this species have been received from Herr Höge from Guadalajara.

Calosoma ampliator.

C. peregrinatori (Guér.) proxime affinis; differt corpore breviori et latiori præcipue thorace valde transverso lateribusque rotundatis nullo modo angulatis. Long. 21—27 millim.

Hab. Villa Lerdo, in Durango ; Guanajuato ; Jalapa ; Chihuahua City ; Nuevo Laredo, in Tamaulipas ; Paso del Norte, in Chihuahua (*Höge*).

Distinctly shorter and broader than *C. peregrinator* ; black, moderately shining, the triple row of small foveæ and the margins of the elytra, in fresh examples, metallic-green. The head is finely punctured, the forehead also coriaceous ; the mandibles densely rugose and punctured ; the tooth of the mentum narrower and more deflected than in *C. peregrinator* and the allied species, so that it is often invisible, without dissecting the mouth. The thorax is transverse-ovate, the sides strongly rounded, widest near the middle ; the hind angles as in *C. peregrinator*, much deflected ; the thickened margin much lowered and thinner at the extreme apex, which is moderately acute ; the disk coriaceous or smooth, sides and base sparingly punctured. The elytra are oblong, scarcely widened behind, finely striate-punctate and triseriate-foveate. Beneath, the metathoracic episterna and sides of basal ventral segments are sparingly punctured. The legs are rather shorter and stouter than in *C. peregrinator*, and the three dilated joints of the anterior tarsi in the ♂ are short and broad, the 2nd and 3rd nearly twice as broad as long.

C. peregrinator (Guér. = *carbonatum*, Lec. sec. Horn) is found in the same localities, Chihuahua and Durango, as *C. ampliator*, but appears to be more common.

Calosoma lugubre, Leconte, Trans. Am. Phil. Soc., x.,
p. 400.

Hab. Nuevo Laredo, in Tamaulipas (*Höge*) ; Texas.

Calosoma macrum, Leconte, Trans. Am. Phil. Soc., x.,
p. 400.

Hab. Nuevo Laredo, in Tamaulipas (*Höge*) ; Texas.

This species, like the preceding, is an addition to the Mexican fauna.

Calosoma læve, Dej.

Dejean's description applies exactly to the numerous examples received from the neighbourhood of the city of

Mexico, Puebla, and other localities on the central plateau. They are of elongate-ovate form, more or less slender, with rounded thorax, having generally a narrow flattened space accompanying the thickened and, even near the hind angle, only moderately reflexed lateral margin, broadly rounded hind angles, and a vague basal fovea on each side rarely with distinct traces of punctuation. The forehead is always rather thickly punctured; the elytra very convex, the convexity beginning gradually from the base, and the posterior declivity being steep; the surface faintly striate-punctulate, rarely quite smooth. The length is 22—25 millim. The punctured forehead always distinguishes it from *C. levigatum*, which is a smaller insect. The following seem to be nothing more than varieties:—

Var. *C. punctulicolle*.—Head punctured to the vertex; thorax broader and with distinctly wider explanated lateral margins; the basal foveæ, base, and sides punctured. Elytra faintly striate-punctate, as in the type-form, but in addition with three rows of small but inconspicuous foveoles. Long. 22—27 millim., ♂ ♀.

Hab. Santa Clara, in Chihuahua; Durango city; Monterey, in Nuevo Leon (*Höge*).

The thorax is wider and a little more quadrate in Durango examples; in the single specimen from Monterey, on the contrary, it is much narrowed behind.

Var. *C. explanaticolle*.—Head with sparser and stronger punctures; thorax behind with wider explanated margin and more broadly rounded hind angles, smooth. The rest as in the type-form. Long. 22—27 millim., ♂ ♀.

Hab. Tupataro, in Guanajuato (*Höge*).

Var. *C. microgonum*.—Precisely like the more slender examples of the type-form, with the remarkable exceptions that the hind angles of the thorax, instead of being broadly rounded, are acute, projecting a little beyond the line of the basal margin, and that the base of the thorax is also distinctly punctured.

Hab. Jalapa (*Höge*), Mexico City (*Flohr*). Three examples.

Calosoma anthracinum, Dej.

Mr. Smith captured several examples of this species at Amula, in Guerrero.

Calosoma lævigatum, Chaud.

Numerous specimens of this species have been received from Real del Monte (Pachuca), from Mr. Richardson.

Calosoma costipenne, Chaud.

Mr. Richardson captured two examples of this insect at Rio Frio.

Calosoma atrovirens, Chaud.

The precise locality of this species was unknown to the describer. Herr Höge obtained it at Tula, in Hidalgo. Only two of his examples were coloured green, with the disk of the thorax black, many others showing a green or bluish tinge only on the borders of the elytra, and on the sides of the prosternum; this is the var. *obscurum* of Gehin's Cat. des Carab. (1885), p. 65. Others from the same locality are entirely black, and are so similar to the typical form of *C. læve*, that I fail to detect any definite character by which to separate them. The only differences are the oily or silky gloss of the surface (*C. læve* being almost always polished black), and the more broadly rounded sides of the thorax preceding the hind angles; some few examples of *C. læve*, however, have precisely the same outline of thorax.

Calosoma omiltemium. (Pl. XIII., fig. 1).

C. blaptoidi (Putz.) affinis; gracilis, niger, supra cærulescens thorace cordato, lævi postice subsinuatim angustato, angulis posticis paullo depressis acutis; elytris gracile ovatis convexis, utrinque octo-costatis, sulculis seriatim tuberculatis et foveolatis, sulcis et foveis versus apicem confusis. Long. 19—20 millim., ♂ ♀.

Hab. Omilteme, in Guerrero, 8000 ft. (*H. H. Smith*).

This distinct species has the slender form and relatively small, cordate thorax, of *C. blaptoides*. The thorax is smooth, silky-opaque, as in that species, but the head differs in having a cluster of large punctures on each side of the forehead, and the mandibles are

smooth only on their outer side, on the inner being rather strongly striated. The thorax differs also in being less uniformly rounded, the sides behind the middle being slightly sinuated, with much more strongly elevated margins, and the hind angles more acute. The elytra are more shining, and their sculpture consists of alternate narrow ribs and wide sulci, interrupted by somewhat regular series of oblong tubercles, each tubercle separated from its successor by a unigranulate fovea; the ribs are much less sharply elevated in some examples than in others, and the sculpture becomes confused near the apex. The legs are slender; the tooth of the mentum is narrow and acute, the penultimate joint of the labial palpi is quadrisetose. The three dilated joints of the anterior tarsi in the ♂ are rather slender, the second not being much broader than long.

Calosoma diminutum. (Pl. XIII., fig. 2).

C. polito (Chaud.) similis sed multo minor et brevior, præcipue elytris breviter ovatis. Convexus, niger politus, capite thoraceque lævissimis, hoc transverso lateribus æqualiter rotundatis, disco usque prope angulos posticos convexo; elytris vix perspicue striato-punctulatis foveisque conspicuis triplice serie.

Var. Elytra distinctly punctulate-striate throughout; the triple rows of foveæ same as in the type. Long. 15—18 millim., ♂ ♀.

Hab. Salazar (*Höge*). A large series of examples, only two of which belong to the variety.

The mandibles are nearly as smooth as the head and thorax. The thorax is almost precisely as in *C. politum*, half as broad again as long, destitute of marginal groove in front, and without trace of thickening on the hind margin, the lateral border moderately thickened and reflexed, the surface smooth and without depression near the hind angles, which are broadly rounded. The elytra are strongly convex, and in nearly all the numerous examples have no conspicuous sculpture, except the three rows of foveæ, which in most specimens are strongly impressed, and one row of small intra-marginal points; but minutely punctured striæ are visible under the lens. The under side is smooth, except two or three punctures on the sides of the ventral segments. The prosternal process is broader and less narrowed behind than in

C. leve and allied species, and the femora and tibiæ are less roughened with punctures, and nearly destitute of setæ.

C. politum (Chaud.) seems to be peculiar to the neighbourhood of Toluca, where Herr Höge obtained a large number of specimens. It is very closely allied to *C. diminutum*, differing, indeed, only in its constantly more elongate form, the elytra being also longer relative to the head and thorax, and its average larger size, viz., 16—21 millim.; the rows of foveæ also are seldom conspicuous.

As individuals (generally small) of *C. diminutum* occur in which the elytra are relatively more elongate than usual, the two species cannot be said to be completely segregated. But, similarly, examples occur (a few in a large series) which connect *C. politum* (Chaud.) and *C. striatulum* (Chevrolat), two species which appear so completely distinct in the majority of their individuals.

Calosoma striatulum, Chevrolat.

In describing *C. politum*, Chaudoir gives the elytral convexity as one of the characters distinguishing it from *C. striatulum*. It is true that the great majority of the examples of *C. striatulum* from Jalapa and Las Vigas have very moderately convex elytra, with the posterior slope much more gradual than in *C. politum* or *C. leve*: but examples occur in both the localities mentioned, and in both sexes, where the convexity is much greater than usual, and not inferior to that of *C. politum*. *C. striatulum* is recognisable by its narrower oblong, scarcely ovate, form, nearly as elongate as *C. striatipenne*, and by the perceptibly more quadrate thorax, besides the striated elytra; but some of the convex examples differ from the usual form also in being distinctly shorter and more ovate, and they are, in fact, exactly intermediate between *C. politum* and *C. striatulum*. As gradations occur, and the variety inhabits the same locality as the type, it is better not to give it a name, as it would be sure to be misapplied hereafter.

Calosoma morelianum.

C. diminuto quoad formam simillimum et forsân ejus varietas localis; differt tamen capite præcipue lateribus sparsim punctato

ibique leviter ruguloso; elytris apud dorsum sat grosse striato-punctatis striis nonnullis vage punctis majoribus interruptis, lateribus lævibus; foveis seriatis haud perspicuis. Long. 15—17 millim., ♂ ♀.

Hab. Huitzilac, in Morelos (*Höge*); El. Guarda, 10,000 ft. (*Flohr*).

The short ovate form and close resemblance in all essential respects would lead one to infer this to be an extreme modification of *C. diminutum*. The sculpture is intermediate between that of *C. striatipenne* and *C. cicatricosum*, both elongate-oblong forms, and easily distinguishable.

Rare. Individuals occur, at Jalapa, intermediate in form of body between *C. morelianum* and *C. striatulum*.

Calosoma porosifrons. (Pl. XIII., fig. 3).

Sat late ovatum, valde convexum nigro-nitidum, fronte utrinque grosse punctata mandibulis thoraceque lævibus hoc valde transverso marginibus lateralibus quam in *C. polito* et affinis multo magis explanatis, angulis posticis rotundatis et paullo productis; elytris late ovatis valde convexis sed prope suturam planatis vel depressis, margine sulcato, laterali latiori et grossius granulato-punctato; vix perspicue striato-punctulatis interdum seriato-foveatis; tibiis intermediis densius asperatim punctato-setosis; metasterni episternis ventrisque lateribus grosse punctatis. Long. 16—19 millim., ♂ ♀.

Hab. Refugio, in Durango (*Höge*). A good series of examples, all readily distinguishable from *C. politum* and *C. diminutum* by the broader intra-marginal sulcus of the thorax and depressed area near the posterior angles, independently of the strongly punctured sides, and often also the middle of the forehead. The general form of body is broader and shorter than even in *C. diminutum*.

Scaphinotus macrogonus. (Pl. XIII., fig. 5).

C. mexicano (Bates) proxime affinis; differt præcipue thoracis angulis posticis valde prolongatis, elytrisque striato-punctulatis interstitiis planissimis. Long. 17—20 millim., ♂ ♀.

Hab. Refugio, in Durango (*Höge*).

All the numerous examples of *Scaphinotus*, labelled by

Herr Höge with the above locality, are conformable to the diagnosis given above, whilst all those ticketed "Ciudad" belong to *S. mexicanus*, in which the hind angles of the thorax are only moderately produced, *i. e.*, not prolonged into a fine point, and the elytra closely and strongly punctate-striated with narrow raised interstices. The general form in *S. macrogonus* is also relatively broader, and the thorax is also a little broader and more quadrate; but *S. mexicanus* varies greatly in these respects, the thorax being sometimes strongly cordate, and more generally slightly cordate, but in some examples nearly quadrate, and the elytra more or less ovate, and often oblong or subelongate; so that reliance cannot be placed on that character. The colour in *S. macrogonus* is generally violet-black, most conspicuously so on the elytra.

Pasimachus duplicatus, Leconte, Trans. Am. Phil. Soc., x., p. 395 (1853); Bull. Buffalo Soc. Nat. Sci., 1874, p. 271; *P. costifer*, *id.*, Proc. Acad. Nat. Sci. Phil., 1854, 79.

Var. *elytris lævibus*.

Hab. Nuevo Laredo, in Tamaulipas (*Höge*); North America, Texas to Missouri.

The Mexican examples have no trace of the geminated rows of punctures on the elytra, which Leconte states is also the case with some of the Texan specimens, and the two lateral carinæ are well-developed, the inner one being sometimes as long as the outer.

Pasimachus ignicinctus.

P. mexicano affinis, parum convexus niger subopacus, thorace (antice excepto) et elytris anguste cupreo-aurato-marginatis; elytris basi et apud humeros latius splendide igneo-auratis, basi a humeris usque ad pedunculum parum rotundato, carinula humerali nulla, passim lævibus striis nonnullis punctulatis versus apicem vix perspicuis. Long. 28 millim.

Hab. Canelas, Sierra Madre of Durango (*Flohr in Coll. Bates*).

The thorax resembles in form that of *P. viridans* (Lec.) more than that of *P. mexicanus*, being transverse

and more narrowed near the base, but the sides behind the middle are more fully rounded, and the sinuation near the base is very short, as in *P. viridans*, but there is scarcely any trace of basal foveæ. The elytra are broader and much flatter than in either species, but are equally elongate; they are opaque, and the rows of punctures, where they are visible, are regular, not geminated; the lateral metallic margins are densely transverse-rugose. The hind tibiæ of the ♂ near the apex are pubescent.

In colours, and in the absence of elytral sculpture, this species resembles *P. aurocinctus* (Chaud.), but the elytra are very different in form, being much longer and rather less convex than *P. intermedius*, instead of shorter, more ovate and convex, as described by Chaudoir.

Pasimachus levisulcatus.

Sat gracilis et minus convexus, toto niger nitidus, thorace fere sicut in *P. cardiodero* (Chaud.) graciliter cordato, lateribus post medium parum rotundato deinde longe sinuato angulis posticis exstantibus acutis; elytris oblongo-ovatis late striatis, striis lævibus opacis postice dilatatis, interstitiis utrinque octo interioribus minus, exterioribus magis, convexis, 2ndo, 4to, et 6to interdum paullo depressis et apice abbreviatis. Long. 21 millim.

Hab. Ciudad, in Durango (*Höge*).

Pasimachus Quirozi, Flohr, Deutsche Ent. Zeits.,
1887, p. 128.

Hab. Coatepec, in Vera Cruz, alt. 3800 ft. (*Flohr in Coll. Bates*).

This species has been described since the publication of vol. i., pt. 1, of the Coleoptera in the 'Biologia Centrali-Americana.'

Pasimachus mexicanus, Gray.

Var. cæruleus.—A typo differt colore supra et infra saturate cæruleo marginibus subviolaceis; elytrorum carina humerali paullo longiori, sculptura nulla. Long. 28 millim.

Hab. Tula, in Hidalgo (*Flohr in Coll. Bates*). One example.

Herr Höge obtained a large series of the typical green

P. mexicanus at Tula, few only of which are black on the disk of thorax and elytra. Of the closely allied *P. viridans*, Leconte, there are two examples only in the collection, both from Ventanas, in Durango.

Pasimachus Smithi. (Pl. XIII., fig. 6).

P. rotundipenni gracilior, thoracis angulis posticis obtusissimis sed non rotundatis, niger minus nitidus, anguste cupreo-viride marginatus; elytris sat elongato-ovatis late striatis striis opacis lævibus, interstitiis mediocriter convexis æqualibus, 3o, 5to, et 7mo longe ante apicem conjunctis. Long. 23 millim.

Hab. Amula, in Guerrero, 6000 ft. (*H. H. Smith*). Two examples.

A distinct species, not closely allied to any hitherto described. The outline of the thorax is less semicircular than in *P. rotundipennis*, and more nearly resembles that of *P. subangulatus*; the hind angles, however, are less distinctly pronounced than in that species, without being broadly rounded off, as in *P. rotundipennis*; the sides also are more broadly rounded in the middle, and converge more to the base, where the thorax is much narrower; the basal impressions are faintly marked. The elytra are somewhat elongate-ovate, convex, the striæ wide, not sharply impressed, opaque, and without distinct punctuation; the interstices convex, nearly equal in width, the 8th without the usual row of punctures.

Scarites Durangoensis. (Pl. XIII., fig. 4).

S. texano (Chaud.) proxime affinis; differt elytris subtilissime punctulato-striatis, striis a 5to oblitteratis interstitiis planis; niger, politus, palpis, antennis et tarsis rufo-testaceis. Long. 19 millim.

Hab. Villa Lerdo, in Durango (*Höge*).

This might be considered merely a local variety of *S. texanus*, but the nearly smooth and polished elytra give it a distinct facies; the eyes, too, are decidedly less convex, and the head broader behind than in *S. texanus*.

Distichus granulipygus.

D. septentrionali affinis; sat angustus, parum convexus, niger nitidus, elytris parallelis, acute striatis, interstitiis interioribus planis, 6—7 convexis striisque 5—7 latius exaratis, interstitio 8vo,

marginè apiceque late granulosis; stria 3io sexpunctata. Mentum rugulosum gula confluentè punctata; metathoracis episterna granulata. Long. 14—16 millim.

Hab. Cordova, in Vera Cruz; San Juan Bautista, in Tabasco (*Höge*).

The head and thorax do not differ from the same parts in *D. septentrionalis*, the mandibles having a smooth longitudinal groove, the epistome 4-dentate, with the two median teeth very small and approximated, and the thorax sinuate-angustate towards the base, dentate at the angle, and minutely granulate in the basal depression; but the elytra differ greatly in their sharply-grooved striæ, broader and deeper towards the sides, with corresponding convex interstices, striæ continuing well-marked to the apex, and in the granulated sides and apex. The transversely grooved ventral segments bring the species within the definition of *Distichus*, but the maxillæ are not much more obtuse than in *Scarites subterraneus*, the hooked apex being less prolonged and acute. The middle tibie have only one very distinct subapical spine.

Schizogenius multisetosus.

S. Truquii (Putz.) affinis et similis; at differt thoracis striis discoidalibus vix ultra medium extensis, elytrorumque interstitiis 3io, 5to et 7to punctis setiferis, in medium interstitium sitis, circa 15; æneus vel æneo-piceus, nitidus, versus apicem plus minusve infuscatus; antennis, palpis et pedibus rufis; clypeo tridentato, carinis duabus medianis antice gradatim acuminatis, fronte utrinque 4-carinatis 2 medianis parallelis; elytris parum convexis, acute striatis, striis usque medium punctulatis. Long. 4—4½ millim.

Hab. Huitzo, in Oaxaca; Yautepec, in Morelos (*Höge*).

The chief difference between this species and *S. Truquii* lies in the short discoidal stria of the thorax, which in *S. Truquii* reaches nearly to the fore margin. But to this are added many peculiarities, *e. g.*, the transverse anterior groove of the thorax is smooth (not punctured as in *S. Truquii*); the frontal carinæ are not all straight, nor do they terminate before reaching the level of the hind border of the eyes, nor do the middle pair join behind in a curved carina. The 7th elytral stria is

smooth in *S. multisetosus*, punctured like the others (all which are punctured nearly to the apex) in *S. Truquii*. The locality of the latter species is Cuernavaca.

Scythropasus elongatus, Chaud.

Two examples, females, of this species have been received from Dr. Gaumer, taken at Temax, in North Yucatan, and I am indebted to the kindness of M. Sallé for a male specimen, also from Yucatan. All agree well with Chaudoir's description, founded on a unique example "from the interior of Mexico." In the Biol. Centr.-Amer., Col., i., 1, p. 24, an insect from Chontales, Nicaragua, is referred to this species, but it differs sufficiently from the Yucatan species to rank as distinct:—

Scythropasus nicaraguensis.

S. elongato differt colore nigro polito, thorace ad basin dilatato elytrorumque striis mediocriter impressis omnino punctulatis.

Body greatly elongated and sublinear, as in *S. elongatus*; head slenderly oval and very gradually narrowed behind the eyes, which are much less salient than in the allied genera. Thorax narrow, quadrate, but a little the widest at the base. The elytra have smooth, and not, as in *S. elongatus*, finely punctured interstices; the rows of larger punctures are, however, the same. Long. 14 millim.

Hab. Chontales, Nicaragua (*Belt*).

Pelecium subdentatum, Chaud.

Examples of this species were captured by Mr. Herbert Smith at Omilteme, Guerrero, at an elevation of 8000 ft.

Micrixys distinctus, Leconte, Proc. Ac. Nat. Sci., vii., 220; id., Col. of Kansas and Eastern New Mexico, p. 1, t. ii., f. 2.

Hab. Durango City, Aguas Calientes City (*Höge*); NEW MEXICO.

The genus *Micrixys* is an addition to the Mexican fauna.

Chlenius chrysopleurus (Chaud.).

The typical form of this species, with a brilliant coppery or gold-green streak on each side of the disk of the

thorax, and the two marginal interstices of the elytra green, extends through Guatemala and Yucatan to Oaxaca and Chilpancingo, on the Pacific coast of Mexico. The var. *C. cæruleus* (Chaud.), described from Puebla, has been found also at Cuernavaca (but the examples are more frequently brilliant green than blue or green, with blue reflections on the elytra) by Herr Höge, who has also brought home a series of the following variety:—

Var. *C. Guerreroensis*.—Elytra black, but clothed with a more tawny pubescence, which gives the surface a brownish tinge; thorax as in the type, brilliant golden coppery, especially on the convex sides, but sometimes green, with the disk black or wholly green; the green border of the elytra extending, especially towards the base, to the 6th or 5th stria. Long. 13—18 millim. ♂ ♀.

Hab. Chilpancingo and Acapulco, in Guerrero; Mazatlan (Höge).

Chlænium ruficauda, Chaud.

A large series of this species was obtained by Herr Höge at Villa Lerdo, in Durango, and Chihuahua City, and an equally large number of the Mexican form at Tehuantepec; the two being strikingly and constantly different in size, width of thorax, and to a minor extent in sculpture, and the degree to which the orange apical spot is sinuated on the suture. The true *ruficauda* is smaller (generally 10 millim.) and more slender, with narrower thorax, more gradually sinuate-angustate behind, and feebly sinuated at the suture. Chaudoir's names, like all the others given in the synonymy, and his description (except as to size) refer to the Californian form, which, according to Leconte's figure, agrees with that of North Mexico; consequently a new name must be applied to the well-defined South Mexican variety or species. Its differential characters are as follows:—

Chlænium cordifer.—Major, thorace latius rotundato, versus basin brevius sinuato, supra sparsius punctato; elytris apice macula magna aurantiaca late cordiformi apud suturam semper fortiter sinuata. Long. 12½ millim.

Hab. Tehuantepec, Oaxaca, Putla.

Chlenius porphyrius. (Pl. XIII., fig. 7).

C. cursori (Chevr.) major, subopacus capite thoraceque paullo nitidis, purpureus capite vel capite et thorace interdum cæruleis; thorace cordato-quadrato sat elongato et planato grosse discrete (disco utrinque paullo sparsius) punctato; elytris elongato-ovatis versus basin gradatim angustatis, punctulato-striatis (punctulis postice obsolete) interstitiis haud dense punctulatis; partibus oris antennis et pedibus rufis. Caput ovatum, oculis mediocriter prominentibus, post oculos transversim depressum, grosse punctatum, media fronte colloque postice lævibus. Palpi articulis apicalibus fere cylindricis. Labrum truncatum. Abdomen medio sparse lateribus paullo densius punctatum. Episterna (præcipue metathoracica) grosse punctata. Long. 16—18 millim., ♂ ♀.

Hab. Xantipa and Omilteme (alt. 8000 ft.), in Guerrero (*H. H. Smith*).

Allied to *C. cursor*, but of more elongate form, the thorax especially longer, quadrate, before the middle moderately rounded, behind the middle slightly narrowed with gradually sinuated sides, the hind angles outstanding, rectangular, as in *C. Rodriguezi* (Chaud.); the surface is only slightly convex, and the anterior angles (as in *C. cursor*) moderately declivous.

Chlenius curybates. (Pl. XIII., fig. 8).

C. porphyrio proxime affinis, sat latior et robustior, thorace latiori et postice brevius sinuato-angustato, angulis posticis rectis, supra similariter grosse discrete punctato. Subopacus cyaneus, elytris lateribus vel margine viridibus, interdum capite et thoracis disco violaceis; antennis articulo 3io semper nigro, 1—2 piceo-rufis, 4—11 testaceo-rufis; capite grosse punctato medio late lævi; labro mandibulis pedibusque nigro-piceis; elytris late ovatis versus basin angustatis, striis vix perspicue punctulatis; cæteris sicut in *C. porphyrio*. Long. 16—18 millim., ♂ ♀.

Hab. Omilteme, 8000 ft.; Xucumanatlan, 7000 ft.; Amula, 6000 ft., in Guerrero (*H. H. Smith*).

The thorax varies in outline, examples in which it is narrower and subcordate are purplish violet, at least on the disk of the thorax, and so far resemble *C. porphyrius* in form and colour; but they are distinguishable from that species by the black 3rd antennal joint and pitchy black legs. A single example from Amula has a wider,

transverse thorax, though otherwise agreeing in shape with the others.

Chlænius beatus. (Pl. XIII., fig. 9).

C. glauco (Lec.) affinis; major, convexus præcipue thorace convexiori lateribus fere æqualiter rotundatis sed antice magis quam postice angustato angulis posticis valde obtusis, supra discrete sat minute (disco utrinque sparsius) punctato, foveis basalibus sat elongatis profundis; elytris acute punctato-striatis, interstitiis planis; capite omnino minutissime punctulato; labro arcuatim emarginato. Caput et thorax viridi-ænea nitida, elytra cum epipleuris viridescente-nigra, vel obscure viridia, fusco-pubescentia, partibus oris pedibus antennisque articulis 1—3 testaceo-rufis, his art. 4—11 fusco-rufis. Long. 14—16 millim., ♂ ♀.

Hab. Cuernavaca (*Höge*). Many examples.

The thorax is more elongate than in *C. glaucus*, and its sides much more rounded and less convergent to the base than in *C. tricolor* and allied species. A single example from Tehuantepec has the thorax less rounded on the sides, hence the hind angles are rather less obtuse.

Chlænius ampliatus.

A *C. beato* differt solum thorace breviori, crebrius et undique punctulato, lateribus equaliter sat fortiter rotundatis, angulisque posticis distinctioribus; capite thoraceque viridi-æneis, elytris viridescenti-nigris, partibus oris antennis pedibusque rufis; labro sat profunde emarginato. Long. 12—13 millim., ♂ ♀.

Hab. Cuernavaca (*Höge*). Several examples.

Notwithstanding the shorter, more rounded and evenly punctured thorax, besides its smaller side, this form may be only a structural modification of *C. beatus*, found in the same locality. The hind angles of the thorax are more pronounced, and in some of the few examples are preceded by a slight sinuation of the lateral margin, a character which connects it with *C. tricolor*; but the elytra, as in *C. beatus*, are more convex, and the striæ much more finely punctured than in *C. tricolor*.

Chlænius suppletor.

C. beato affinis, sed differt thorace paullo grossius et sparsius punctato lateribus regulariter arcuatis, angulis posticis obtusis.

Capite et thorace cæruleis, viridescenti-cæruleis vel violaceis, elytris obscure cærulescenti-nigris; labro late sinuato et capite sicut in *C. beato* minutissime punctulato. Long. 12—14 millim., ♂ ♀.

Hab. Cordova, in Vera Cruz (*Höge*).

This resembles *C. beatus* so closely in the form of the thorax and other characters, that it may be only a local modification of the same stock. There is, however, a good series of each form, and the peculiarities are constant. It is smaller, and the elytra especially are relatively shorter and more rounded on the sides, so that they may be described as oval; whilst in *C. beatus* they are elongate oblong-ovate. The punctuation of the thorax is stronger, and on the disk sparser. The epipleuræ of the elytra and lateral margins of the thorax are deep black.

Dercylus (Dercylodes) mexicanus.

D. crenato (Schaum.) simillimus, sed certe differt elytris humeris angulatis dentiferis striisque in fundo solum subtilissime punctulatis. Paulo brevior elytrisq; minus convexas, fere parallelis; capite thoraceq; haud diversis, elytris profunde striatis interstitiisque valde convexas; subtus lævis, tibiis rectis; niger subnitidus palpis rufis. Long. 14 millim.

Hab. Tapachula, in Chiapas (*Höge*). Two examples.

The species belongs, like *D. crenatus*, to Chaudoir's generic group *Dercylodes*, separated from *Dercylus* chiefly on account of the sexpunctate labrum, the latter group having only two punctures. The genus is Tropical South American, this being the first species recorded from north of the Isthmus of Panama.

Dicalus costatus, Leconte, *Classif. Carab. U. S.*, p. 389 (1853); *Journ. Ac. Nat. Sci.*, iv., 1, t. 1, f. 7.

Var. *Lerdoensis*, Villa Lerdo, in Durango (*Höge*). Two male examples, differing in nothing but their larger size (34 millim.), and the somewhat rounded sides of the thorax at the anterior part, which gives a less trapezoidal outline. In six Texan examples of *D. costatus*, received from Belfrage, the size varies from 26—28 millim.

An addition to the Mexican fauna.

Dicælus lævipennis, Lec. (*D. Flohri*, Bates).

Herr Höge's last collection contained a good series of this species from three localities—Mexico City, Toluca, and Refugio in Durango. In the two former, all the examples belong to the variety *Flohri*, oblong, robust, with the sculpture of the elytra limited to one or two (very rarely to three) lines of punctures towards the suture, and the apex subacuminately rounded, the specimens from Mexico being, as a rule, rather longer (22 millim.) than those from Toluca (17—20 millim.). At Refugio the species is much modified, the form being shorter and oblong-ovate rather than oblong in outline, with the apex of the elytra more rounded, and the surface having nine complete but fine rows of punctures. There is, however, among the large series sent by Herr Höge, considerable variation, some individuals being larger and more elongate, with the apex of the elytra less broadly rounded: these form the transition to the smaller examples from Toluca, and come nearest the typical form of *D. lævipennis* from Colorado and Utah; others are remarkably short and ovate, and, if seen apart from transitional grades, would be taken for a distinct species; and this var. may be thus characterised:—

Var. *D. abbreviatus*.—Sat breviter oblongo-ovatus apice late rotundatus, niger subnitidus marginibus interdum viridescens; elytris subtiliter striato-punctulatis, carina humerali parum elevata subobsoleta. Long. 14½—17 millim., ♂ ♀.

Hab. Refugio, in Durango (*Höge*).

Anisotarsus purpurascens, Bates.

Numerous specimens of this insect were captured by Herr Höge at Nuevo Laredo, in Tamaulipas.

Anisotarsus hilariolus.

A. cyanippo (Bates) affinis, breviter oblongus, supra (♂ ♀) nitidus metallicus, capite et thorace viridescenti-cæruleis, elytris ænescenti-cupreis (raro toto viridi-æneus); capite sat lato fronte subplanata sutura transversa profunda; thorace transverso, quadrato, ante medio leviter rotundato deinde subrecte et paullo angustato angulis posticis valde obtusis haud vero rotundatis, foveis basalibus fortiter impressis, toto lævi; elytris breviter oblongo-

ovatis politis acute striatis, interstitiis omnino planatis, interstitio 3io unipunctato, 7mo impunctato. Palpi et antennæ fulvo-testaceæ, corpore subtus pedibusque nigris tarsis piceo-rufis. Long. $10\frac{1}{2}$ —12 millim., ♂ ♀.

Hab. Omilteme, in Guerrero, 8000 ft. (*H. H. Smith*).

A shining metallic species, like *A. cyanippus*, but the thorax different in form, the sides not being regularly arcuated, but the curvature greatest a little before the middle, and thence very slight, or the sides straight, to the hind angles. This form gives the species the aspect of a *Harpalus* of the group *H. rubripes*. The dilated tarsi in the ♂ are transverse-cordate or broadly triangular, except the first joint, which is narrowly triangular. The species is also closely allied to *A. peruvianus*, Dej., but it is rather more elongate and less convex. From *A. mexicanus*, Dej., which it resembles in form, though smaller and shorter, it differs, besides colours, in the very obtuse hind angles of the thorax.

Anisotarsus virescens, Dej.

Examples of this species have been received from Herr Höge, from Cuernavaca and Salazar.

Harpalus Durangoensis.

H. herbivago (Say) similis, oblongus, convexus, politus, nigropiceus; antennis palpis pedibusque fulvo-testaceis; thorace paullo transverso quadrato postice leviter angustato, apud basin quam elytris angustiori prope angulos posticos planato, lateribus nullo modo sinuatis, angulis posticis fere rectis sed apice obtusis, margine laterali rufescenti, fovea basali angusta, basi lævi sed interdum vage punctato; elytris crenulatum punctulato-striatis, humeris dentatis plica basali perparum curvata, striola scutellari cum foveola prope striæ 2ndæ basin conjuncta, interstitiis parum convexas, puncto unico juxta striam 2ndam, apice late subsinuatim rotundatis. Long. $7\frac{1}{2}$ —9 millim., ♂ ♀.

Hab. Refugio and Ciudad, in Durango (*Höge*).

Harpalus gravis, Leconte, Proc. Ac. Phil., 1858, p. 60.

Hab. Matamoros Izucar, in Puebla (*Höge*); NORTH AMERICA, TEXAS.

There is one example of this species, an addition to the Mexican fauna, in Herr Höge's collection.

Harpalus mexicanus, Chaud.

Found in abundance by Herr Höge at Villa Lerdo, in Durango; also sparingly at Durango City and Paso del Norte.

Pangus caliginosus, Fabr.

Mr. Höge has found this well-known and conspicuous North American species near Chihuahua City.

The genus is an addition to the Mexican fauna.

Cratacanthus dubius, Beauv.

This species, widely distributed in the Atlantic States, has been taken by Herr Höge at Villa Lerdo, in Durango.

Also an additional genus to the Mexican fauna.

Selenophorus aureocupreus.

Angustus, subelongatus, thorace angulis posticis rotundatis, supra æneo- vel aureo-cupreus subnitidus, palpis, antennis articulis 1—2 (cæteris fusco-nigris) corpore subtus pedibusque testaceo-rufis. Long. 7 millim., ♂ ♀.

Hab. Huetamo, in Michoacan (Höge). Many examples.

Resembles in form and in the rounded angles of the thorax the smaller and narrower specimens of *Discoderus arcuatus* (Putz.), but the four anterior tarsi of the ♂ are dilated and biseriata-squamulate beneath, and the species therefore belongs to *Selenophorus*. The hind angles, moreover, are not quite so obliterated as in *Discoderus arcuatus*; they are, on the contrary, perceptible as angles, though very obtuse; the sides of the thorax also are not arcuated, the rounding being limited to the front a little before the middle, whence they are (especially in the ♂) nearly straight to the hind angles; the disk is remarkably convex, the space near the hind angles flattened and punctulated, the hind marginal groove not interrupted in the middle. The elytra are sharply striated, the striæ deeper and broad near the apex, the row of punctures near the 2nd, 5th, and 7th small but conspicuous; the apex is subacuminate, with strong sinuation of the subapical margin.

Selenophorus tarsalis, Putz.Var. *liosomus*.

Differs from the type-form, as found in Mexico and Guatemala, only in its larger size and the more polished and more strongly iridescent surface. The colour is piceous, metallic above, inclining to green on the head and thorax, and brownish coppery on the elytra. The sides of the thorax are arcuated, much more strongly so than in *S. splendidus* (Putz.), the greatest width being just before the middle; the sides become less arcuated, almost straight, towards the base, and the hind angles are well-pronounced, though obtuse; the base has scarcely any punctuation. The interstices of the elytra are smooth to the apex, except the 9th (marginal) and the edge of the 8th, which are finely punctured. The antennæ, parts of mouth and legs, are tawny red, the femora in some examples darker and piceous. Long. 10 millim.

Hab. Temax, in Yucatan (*Gaumer*). Many examples.

Selenophorus bradycelloïdes.

Parvus, nitidus, rufo-testaceus, capite postice, maculis thoracis discoidalibus duabus elytrisque interstitiis 2—6, castaneo-fuscis vix metallicis; antennis articulis 3—4 nigro-fuscis; thorace subcordato-quadrato, postice sinuato-angustato angulis posticis rectis, basi utrinque planato, punctulato; elytris acute striatis, apice oblique modice sinuatis, interstitiis planis (apice vix convexioribus) 3io, 5to et 7mo seriatim punctatis. Long. 5 millim.

Hab. San Juan Bautista, in Tabasco (*Höge*).

This small and distinct species is not recognisable as a member of the genus *Selenophorus* at first sight; the shape and style of coloration being rather those prevailing in *Acupalpus* and *Bradycellus*. The maxillary palpi also are more gradually pointed than in the restricted *Harpalinæ* group, but the rounded punctiform frontal foveæ, the edentate mentum, and the triseriately punctured elytra show that the species is a *Selenophorus*. The punctures are very distinct and deep, but few in number; the row of six on the 3rd interstice lying near the 2nd stria, that of the 5th (five in number) near the 6th and that of the 7th (consisting

of four punctures only) lying in the 8th stria. The two marginal interstices and the apical portions of all are as usual, in *Selenophorus*, thickly and finely punctured.

Selenophorus punctatulus, Putzeys, Biol. C. A., Col., i.,
1, p. 62.

Examples of this species have recently been sent by M. Gaumer from Temax, in Yucatan, the State whence the insect described by M. Putzeys was obtained. The species belongs to a group of the genus in which the thorax (except on the disk) and the elytra are closely punctured, a group which connects *Selenophorus* with *Arthrostickus*. The glabrous elytra of *S. punctatulus* may justify the retention of the species in *Selenophorus*, although under the lens a very fine laid pubescence is seen on the sides towards the apex, especially in the females.

S. punctatulus occurs also at Tampico and Minas Viejas. The following is a closely related species:—

Selenophorus dispar.

S. punctatulo paullo major; differt elytris densius punctulatis in ♀ undique, in ♂ lateribus tantum, fulvo-pubescentibus; ♂ politus opalescens, ♀ vix nitida. Elongato-oblongus, piceo-niger; antennis palpis pedibusque melleo-flavis; thorace lateribus paullo ante medium arcuatis, angulis posticis fere rotundatis, basi late et dense, lateribus et antice sparsius punctulatis, disco glabro. Long. $7\frac{1}{2}$ —10 millim.

Hab. Cuernavaca, in Morelos (*Höge*); Chilpancingo and Iguala, in Guerrero (*H. H. Smith*).

This species departs somewhat widely from the typical *Selenophori*, and perhaps would be better placed with its allies, *S. paganus*, Dej., *S. rufilabris*, Dej., and *S. rugipennis*, Putz., in the genus *Arthrostickus*. The tri-seriate punctures of the elytra are very small and liable to be overlooked.

Selenophorus crassiusculus, Putzeys.

This species, recognisable by its robust, convex form and rather long suboval thorax, with hind angles broadly rounded, is met with—its typical state—in Oaxaca, and at Cuernavaca, Yautepec, Tehuacan, in Puebla, and

Ventanas, in Durango. All the examples have clear reddish-tawny antennæ (slightly browner in some Ventanas specimens), and palpi and reddish tarsi, the labrum in some cases being also tawny red. Putzeys gives 10 millim. as the size. In a large series taken by Herr Höge the length varies only between 10 and 11½ millim. The thorax never assumes the subcordate form, that is, distinctly broader before the middle, the arcuation of its sides being generally regular; but the degree of arcuation varies much, and in the smaller examples the widest part is a little before the middle, with the sides thence to the base a little straighter than in all the larger and more typical specimens, so that there is little to distinguish them from *S. arcuatus* (Putz.) except the unicolorous reddish antennæ and somewhat longer thorax. In the ♂ the four anterior tarsi have four dilated joints, the sides of the 2nd—4th only being clothed with hair-scales; the middle tibiæ are slightly arcuated, but not denticulate on the inner side. The species therefore belongs to *Selenophorus*, although its facies and form of thorax are those of *Discoderus*.

Var. *S. nigrescens*.—Rather smaller (9 millim.); legs (including tarsi) and antennæ black, joints 1—2 red; palpi dull reddish, more or less varied with black. Thorax nearly as in the type-form.

Hab. Irapuato, in Guanajuato; Mexico City; Aguas Calientes City; Atenquique, in Jalisco (Höge).

A good series of examples. This form seems to be a transition stage between *S. crassiusculus* and *S. arcuatus*. A dark blue variety of *S. nigrescens* is not uncommon.

Selenophorus arcuatus, Putzeys (nec *Discoderus amblyderus*, Bates, Biol. Centr.-Am., Col., i., 1, p. 63).

Putzeys distinguished this species from his *S. crassiusculus* by its smaller size (7½ millim.), black antennæ, with the two first joints red, and the broader, more transversal, and less rounded thorax. These characters are found in a species of which I have seen many examples from the neighbourhood of Mexico City, and which in some individuals, where the sides of the thorax are more arcuated than usual, are scarcely distinguishable from the smaller specimens of *S. crassiusculus* var. *nigrescens*. When I referred *S. amblyderus* to the same

species, I had not seen any examples of the male of *S. arcuatus*, many of which have since been received and prove to have four dilated joints to the four anterior tarsi, with the soles of joints 2—4 only squamulose, and simple middle tibiæ, precisely as in *S. crassiusculus*. Putzeys' species must therefore be retained in the genus *Selenophorus*. *D. amblyderus*, on the other hand, which in the ♀ is with great difficulty distinguishable from *S. arcuatus*, has in the ♂ simple anterior tarsi, and the middle tibiæ armed on the inner side with a row of blunt denticulations, and is consequently a *Discoderus*, though the middle tibiæ are not more arcuated than in the ♂ of *Selenophorus crassiusculus*. Long. $7\frac{1}{2}$ —9 millim.

The synonymy will stand thus :—

Discoderus amblyderus.

= *Selenophorus* id., Bates, Proc. Zool. Soc., 1878, p. 591.

Discoderus arcuatus, id., Biol. Centr.-Am., Col., i., 1, p. 63 (nec *S. arcuatus*, Putz.).

Mexico City, Aguas Calientes, Jalapa; Durango City, Cuernavaca.

The thorax is, in the majority of the individuals, decidedly shorter than in *S. arcuatus*, and is more narrowed behind, but the arcuation of the sides varies greatly.

Discoderus dislocatus.

D. acinopöidi (Bates) affinis et similis, differt colore piceo-fusco vix æneo-tincto striolaque scutellari brevi, obliqua, cum stria 2nda conjuncta et a foveola umbilicata separata. Facies *Acinopi*, oblongus, convexus politus ænescenti-fuscus, palpis antennis tarsisque testaceo-rufis; thorace lævi quadrato, postice perparum angustato et lateribus paullulum rotundatis, angulis posticis rotundatis; elytris breviter oblongis acute striatis, punctorum triplici serie minutis vix perspicuis, striis 2nda, 5ta et 7ta contiguis. ♀ tibiæ intermediæ paullo curvatæ intus simpliciter ciliatæ; ventris segmentum apicalen utrinque bipunctatum. Long. 12 millim., ♀.

Hab. Durango City (*Höge*).

In form of body and in the simple and slight curvature of the middle tibiæ agrees with *D. acinopöides* of the same sex, but differs in the elytra not being metallic cupreous, as in that species, and in the curious dislocation of the scutellar striole, which in *D. acinopöides*, as in other allied species, proceeds from the basal umbili-

cated foveole, and in *D. dislocatus* proceeds from the 2nd stria at a distance behind the foveole. The difference must be admitted to be very slight, but, being constant in the four examples (all females, like the single specimen of *D. acinopoïdes*), it appears to be of specific significance.

Stenolophus plebejus, Dej., Sp. Gén., iv., p. 424.

Hab. San Juan Bautista, in Tabasco (*Höge*).

Herr Höge obtained numerous examples, all females, of this species; an addition to the Mexican fauna. They differ in nothing but their little larger size from specimens received from Pennsylvania and New York. In all the numerous examples I have seen the elytra become gradually more rufous towards the sides, especially near the apex, a feature not mentioned by Dejean. The species is very closely allied to the common European *S. vespertinus*, but is sufficiently distinct in the colour of the elytra, and in the antennæ having always two basal joints rufous.

Stenolophus lamprotus.

S. vespertino quoad formam similis, sed major elytris que disco lætissime opalescentibus. Rufus, ventro infuscato, capite nigro, elytris interstitiis 2—4 (medio 2—5 vel 2—6) nigris politissimis, iridescentibus, limbo castaneo-rufo. Antennæ pallide rufæ articulis 3—11 vix perspicue infuscatis. Thorace relative angusto, postice angustato, angulis posticis omnino rotundatis, fovea utrinque basali lata parum impressa sparsim punctulata. Long. 6½ millim.

Hab. Villa Lerdo, in Durango (*Höge*). Two examples.

Agonoderus pallipes, Fabr., Dej.

Hab. Paso del Norte, in Chihuahua, and Villa Lerdo, in Durango (*Höge*).

This genus is new to the Mexican fauna. The species, of which only three examples were sent, agrees with numerous boreal American specimens apparently of *A. pallipes*, with which I have compared it.

Bradycellus Flohri, Bates, Biol. C.-A., Col., i., 1, p. 72.

Var. *denigratus*.

A good series of this apparently local modification of *B. Flohri* was obtained by Herr Höge at Ciudad, in Durango. It agrees with the type in its narrow subelongate form, and in the obsolete hind angles of the thorax with rather strongly punctate basal foveæ. The hind angles of the thorax are, however, more completely rounded, and the form therefore may really be specifically distinct. The colour above and beneath is deep black or pitchy black, and only in immature examples shows a rufous tinge along the suture and lateral borders of the elytra, and the lateral margins of the thorax. The antennæ are nearly black, with the basal joint only red, the second sometimes pitchy red. The legs are pitchy red, with the femora generally darker. The palpi also are dark piceous, with the tapering part of the apical joints more or less pallid. Long. $4\frac{1}{2}$ millim.

Celia californica, Dejean, Sp. Gén., iii., p. 474.

This common Californian species was recorded by Putzeys as occurring also in Sonora, and was accidentally omitted as a Mexican species in the 'Biologia.' Herr Höge has since met with it in Durango (near Ciudad), and at Chihuahua City and Paso del Norte. His specimens range in size from 8 to $10\frac{1}{2}$ millim., and on the average are therefore larger than the very closely allied *C. mexicana*, which varies from $7\frac{1}{2}$ to 9 millim. On comparing a large series of both, among which are several examples from California, I find no difference whatever in form or sculpture, and nothing remains but the prevailing darker antennæ (from the 3rd joint) and darker legs to distinguish *C. mexicana* from *C. californica*, nearly all of which have clear tawny red antennæ, palpi, and legs. As examples with reddish antennæ and legs occur among darker ones in various Mexican localities, *C. mexicana* can only be considered an imperfectly segregated subspecies of *C. californica*.

Celia Høgei, Bates, Biol. C.-A., Col., i., 1, p. 77.

Further examples of this species have been received. It is easily recognisable by its constantly black, rarely

bluish or brassy black, colour, and the black legs, palpi, and antennæ, the two basal joints of the last-named only being red. It is a little smaller and rather more oblong than the equally, but more sooty, black *C. mærens* (Zimm.), which is distinguished also by its antennæ being wholly black, with the basal joint only (very rarely the second also) dull red.

The following appears to be nothing but a local colour variety of *C. Hægei*:—

♀ Var. *C. civitatis*.—Oblong-ovata læte cuprescenti-ænea interdum obscure fusciscenti-ænea, cyanea vel violacea; pedibus sæpe rufescentibus. Long. 8—9 millim.

Hab. Ciudad, in Durango (*Höge*).

A good series of examples, in all of which the two basal joints of the antennæ are red, the rest and the palpi black. The sculpture of the upper surface offers no constant difference from *C. Hægei* or from *C. californica* and *C. mexicana*, but the exterior striæ of the elytra are frequently more faintly impressed.

Celia tenebrionella, Bates, Biol. C.-A., Col., i., 1, p. 77.

Var. *aneicolor*.—Supra cuprescenti-ænea. Long. 7 millim., ♂ ♀.

Hab. Ciudad, in Durango (*Höge*). A good series of specimens.

This Ciudad form of the black *C. tenebrionella* bears the same relation to its type as the metallic *C. civitalis* in the same locality bears to *C. Hægei*. The basal joint only of the antennæ is red, the rest of the antennæ, the palpi, and legs being black. There is very little difference between *C. tenebrionella* and *C. Hægei*, except in size, the latter being 8—9 millim., but I have seen no intermediate examples.

Celia Ciudadensis.

Oblongo-ovata, niger subænea vel (immatura?) pallidius fusco-ænea; palpis antennis pedibusque fulvo-rufis; thorace sicut in *C. infima* versus basin haud latiore, lateribus leviter arcuatis, basi plus minusve punctata, utrinque foveis duabus sat profundis (exteriori rotundato); elytris striatis stria scutellari juxta basin

a 2nda incipienti, simplici, interstitiis planis 9o angusto. Long. 8 millim., ♂ ♀.

Hab. Ciudad, in Durango (*Höge*).

The arcuated sides of the thorax would render this species almost equally well placed in the genus *Leio-enemis*, but the base is not distinctly narrowed; the arcuation of the lateral margin continues (though becoming slight) to the hind angles, which are obtuse rather than rectangular. In the darker examples the basal half of the terminal joints of the palpi is dark brown.

Celia rectangula, Leconte ?.

Hab. Paso del Norte, in Chihuahua (*Höge*); NORTH AMERICA, Oregon, California (*Lec.*), Arizona (*Morrison*).

I refer this insect, taken abundantly by Herr Höge, to *C. rectangula*, *Lec.*, with some hesitation; but it agrees with his brief description fairly well. The species is an addition to the Mexican fauna.

Evarthrus substriatus, Leconte, Ann. Lyc. N. Y., iv., p. 344; Proc. Ac. Nat. Sci. Phil., 1873, p. 319.

Hab. Ciudad and Refugio, in Durango (*Höge*).

A large series, varying greatly in size (13 to 17 millim.), and to some extent in form of body, some examples being shorter, with more ovate elytra, like specimens I have seen of this species from Kansas, and others being decidedly more oblong. The elytra are generally very finely striate-punctate towards the suture, but in some examples they are smooth, with only faint traces of striæ under the lens. According to Leconte the elytral striæ are sometimes effaced. Also, like the following, an addition to the Mexican fauna.

Pæcilus chalcites, Say.

Herr Höge captured a specimen of this boreal American insect at Paso del Norte.

Euchroa chrysophana. (Pl. XIII., fig. 10).

E. dimidiata (*Chaud.*) proxime affinis; paullo minor et angustius oblonga, supra læte cuprescenti-æneæ viridi-refulcens; antennis

et pedibus piceo-rufis, palpis pallidioribus femoribusque obscurioribus; subtus nigra. Thorax quadratus ante medium paullo rotundatus, angulis posticis rectis interdum subacutis, basi utrinque fovea lineari profunda, inter foveam et angulum planata, foveola minori parum impressa. Elytra subtiliter striata striis interioribus 3 interruptis et in lineolas dissolutis, omnibus usque ad apicem, 6to et 7mo fortiter, impressis; interstitiis planis impunctatis, marginali cum elytrorum apice subtiliter alutaceis; humeris valide dentatis, striola scutellari nulla. Long. 10—11 millim., ♂ ♀.

Hab. Omilteme, in Guerrero (*H. H. Smith*).

The thorax varies in outline in this species and in *E. dimidiata*, and the striæ are equally fine in both, with a tendency in those near the suture to break up into punctures or short lineoles. The difference in the colour of the upper surface is, however, constant throughout a fair series of each, the head and thorax being, in *E. dimidiata*, always strongly contrasted in colour (metallic-green) with the elytra, which vary from coppery red to golden green. The mesosternal process in *E. chrysophana* is immarginate at the apex, in *E. dimidiata* (which Chaudoir places in the section of the genus having a margined prosternum) it is variable, the margin being often feeble, and in some examples quite obsolete. The apical ventral segment in both sexes has two large foveæ; the four foveæ of the ♀ is not therefore a generic character, as stated by Chaudoir.

Loxandrus rubricatus.

L. infimo (Bates) proxime affinis sed elytrorumque apice vage rufo-maculato. Elongatus niger nitidus elytris parum opalescentibus, elytris apice cum epipleuris castaneo-rufis; antennis palpis et pedibus fulvo-rufis. Thorax quadrato-cordatus, postice sinuatim leviter angustatus, angulis posticis subacutis, ad basin sparsim punctatus. Elytra dorso depressa, punctato-crenato-striata versus apicem striis et punctis minus late impressis ibique interstitiis planioribus et (♀) subtiliter alutaceo-strigosis; humeris rotundatis, apice parparum sinuatis. Long. 10 millim., ♀.

Hab. Chilpancingo, in Guerrero (*Höge*).

Very closely allied to *L. infimus* (*Biol. C.-A., Col., i., 1, p. 87*), of which we have received, since the description was published, further examples taken at San Juan Bautista, in Tabasco, by Mr. H. H. Smith, some of

which are nearly as large ($8\frac{1}{2}$ millim.) as *L. rubricatus*. The sculpture of the elytra and peculiar fine striation of the apical portion in the ♀ are the same in both species. The acute outstanding hind angles of the thorax are also nearly the same, but the thorax is a little longer relatively in *L. rubricatus*. There remains for the chief distinctive character the bronzy red vaguely-defined long oval spot near the sutural interstices, and the similarly coloured apical border and epipleuræ.

Morio cyclomus, Chaudoir, Bull. Mosc., 1854, ii., p. 328.

Hab. Teapa, in Tabasco (*H. H. Smith*).

This species has previously been recorded from Columbia, the Upper Amazons, Pará, and Minas Geraes, in South Brazil, but not from Central America.

Calathus gregarius, Say.

Specimens of this insect were captured by Herr Höge at Refugio and Ciudad in Durango, Real del Monte in Hidalgo, and La Noria in Sinaloa. The species was doubtfully included by me in the Mexican fauna on p. 279 of the Coleoptera of the Biol. Centr.-Am., vol. i., pt. 1.

Calathus ambigens.

C. mexicano (Chaud.) affinissimus, sed differt thorace haud postice angustato, lateribus rufo-translucentibus paullo explanato-reflexis. Piceo-niger leviter æneo-tinctus, antennis palpis pedibus margineque laterali prothoracis rufescentibus, thorace quadrato apud basin paullulum latiori quam ad apicem, lateribus plus minusve arcuatis, basi versus angulos obtusissimos planata, puncto setifero magno conspicuo; elytris striis hic illic indistincte punctulatis, interstitiis planis 3—4 punctato. Long. 8—9 millim., ♂ ♀.

Hab. Ciudad, in Durango (*Höge*).

Rather more elongate and slender in all its parts than *C. mexicanus*, and with constantly paler rufous antennæ and legs. The thorax differs in being broader behind, and having rufo-translucent lateral margins. It resembles the European *C. micropterus*, but is larger.

Pristodactyla impunctata, Say, Trans. Am. Phil. Soc., ii., p. 45; *P. Americana*, Dej., Sp. Gén., iii., p. 83.

Hab. Ciudad, in Durango (*Höge*).

This genus is an addition to the Mexican fauna.

Anchomenus (Agonum) megillus.

A. alyconæ affinis sed multo major, præcipue elytris magnis latius oblongis. Caput et thorax relative parva, supra viridi-ænea polita, hoc rotundato, lateribus et margine basali versus angulos posticos sat alte reflexis, ibique dorso concavo et in concavitate fovea profundiori impresso, angulis rotundatis. Elytra viridi-vel cuprescenti-ænea, acute striata, interstitiis planis tertio punctis 4—5 grossis partim in medio interstitio sitis. Subtus piceo-niger, pedibus sordide testaceis femoribus versus apicem, tibiis et tarsis partim, infuscatis. Antennæ et palpi fusco-nigra. Long. 10—11 millim.

Hab. Villa Lerdo, in Durango (*Höge*). Many examples.

Anchomenus cyclifer, Bates.

Found in profusion by Herr Höge at Villa Lerdo, in Durango.

Elliptoleus olisthopoides.

E. flavipedi (Dej.) affinis et similis, nigro-fuscus æneo-tinctus, antennis palpis et pedibus fuscis vel fusco-rufis, thorace subcycathiformi ab angulis anticis usque ad basin curvatis et angustatis angulis posticis nullis ibique margine leviter reflexo, elytris striis omnibus sat acute impressis et subpunctulatis. Long. 6½—7 millim.

Hab. Ciudad, in Durango (*Höge*).

Very closely allied to *E. flavipes* and *E. virstriatus*, but well-distinguished by the fine distinctly impressed elytral striæ and darker colour of the legs.

Colpodes haptoderoides. (Pl. XIII., fig. 11).

C. pterostichoidi (Bates) et *C. orthomo* (Chaud.) affinis et subsimilis. Sat breviter oblongus parum convexus piceo-niger nitidus, palpis antennis, tibiis et tarsis testaceo-rufis. Caput ovatum post oculos gradatim angustatum. Thorax elytris paullo angustior, quadratus antice magis quam postice angustatus, paullo ante

medium rotundato-dilatatus deinde usque ad basin sinuatus, angulis posticis exstantibus acutis; angulis anticis acutis, lateribus et basi prope angulos sat late planatis, margine tenui, interdum rufotranslucenti. Elytra subpunctulato-striata striis versus apicem grossius exaratis, interstitiis planis, tertio bipunctato, puncto primo prope medium (interdum deficiente) raro tripunctato; basi utrinque fortiter arcuata, humeris porrectis haud vero dentatis; stria prima ad basin attingenti ibique in foveam desinenti; prope apicem sat fortiter sinuata. Metasterni episterna brevia. Tarsi graciles, 4 postici lateraliter sulcati; 4 anteriores articulo 4to brevissime bilobato, lobis paullo inæqualibus. Palpi articulo apicali graciliter fusiformi apice vix perspicue truncato. Thoracis puncto setifero posteriori in margine ipso anguli sito. Long. 10—12 millim., ♂ ♀.

Hab. Omilteme, in Guerrero, 8000 ft. (*H. H. Smith*). A large series of examples.

In *C. pterostichoides* the elytra have a coppery tinge, and are much more finely striated; the thorax, though essentially similar in shape, differs conspicuously in being less narrowed in front of the anterior dilatation, with less acute angles, so that it is as broad at the base as at the apex, and the hind tarsi are flattened above, and hence appear broader.

Colpodes harpaloides. (Pl. XIII., fig. 12).

Sat breviter oblongus, politus, ænescenti-niger, elytris cupreis, antennis palpis et tarsis obscure piceo-rufis. Caput late ovatum; antennæ breves. Thorax transverse quadratus lateribus mediocriter arcuatis et explanato-reflexis, postice nullo modo sinuatis sed angulis posticis breviter exstantibus subrectis, puncto-setifero supra angulum. Elytra oblonga parum convexa basi utrinque paullo arcuata ad apicem distincte sinuata, subtilissime subpunctulato-striata, interstitiis planissimis tertio tripunctato. Metasterni episterna brevia latitudine basali haud longiora. Tarsi 4 postici supra paullo depressi utrinque sulcati articulo 4to brevissime inæqualiter bilobato. Long. 11 millim.

Hab. Omilteme, in Guerrero, 8000 ft. (*H. H. Smith*). Three examples.

A species not closely allied to any other known to me in the genus. The head has the usual two supra-orbital setæ.

Colpodes steropoides. (Pl. XIV., fig. 1).

C. sphodroidi (Chaud.) affinis sed magis convexus, elytris relative brevibus ovatis. Niger nitidus; caput paullo latius ovatum, oculis paullo prominentibus; seta supraorbitali anteriori deficienti, Thorax late ovatus postice multo magis quam antice angustatus, angulis anticis obtusis sed a collo distantibus, posticis omnino rotundatis puncto-setifero posteriori deficienti. Elytra tenuiter striata, interstitiis planis tertio 3-punctato, margine basali recto, angulis humeralibus obtusissimis, apice rotundata nullo modo sinuata. Antennæ, palpi et tarsi obscure rufo-testacea. Metathoracis episterna brevia latitudine anteriori haud longiora. Tarsi omnes articulo quarto angulis sat longe inæqualiter productis; 4 postici lateraliter sulculati, articulo unguiculari glabro. Long. 10½—12 millim.

Hab. Omilteme, in Guerrero, 8000 ft. (*H. H. Smith*). Many examples.

Agrees rather better with Chaudoir's description of his *C. biovatus* than the typical specimen of that species in the Sallé collection does, with the exception that in our species the thorax is strongly narrowed behind, and not equally narrowed behind and before, as stated by the describer. In facies *C. steropoides* resembles a small *Steropus*, e. g., *S. Illigeri*, except that the elytra are more ovate. In the singular absence of the anterior supra-orbital seta it agrees with *C. sphodroides*, but in facies the two species are wholly dissimilar.

Colpodes platysmoides. (Pl. XIV., fig. 2).

Elongato-ovatus fuscus supra æneo-tinctus nitidus, palpis antennis et pedibus rufis. Caput breviter ovatum, setis supra-orbitalibus duabus. Thorax elongatus subquadratus ante medium mediocriter rotundatus postice gradatim, versus basin sinuatim, angustatus, angulis posticis distinctis sed obtusis margine basali prope angulum obliquato, lateribus mediocriter explanato-reflexis prope angulum posticum planatis, angulo haud elevato. Elytra ovata convexa, basi utrinque valde arcuata, humeris acutis, apice valde sinuata; exarato-striata prope apicem striis fortioribus, interstitiis planis tertio tripunctato, 6to 7mo et 8vo postice longitudinaliter concavis. Metathoracis episterna brevia paullo transversa. Tarsi graciles, 4 postici fortius sulculati, articulo 4to graciliter triangulari angulis inæqualiter breviter productis, articulo

5to subtus glabro. Antennæ elongatæ, graciles. Long. 12 millim., ♂ ♀.

Hab. Omilteme and Xantipa, in Guerrero (*H. H. Smith*).

The metathoracic episterna are nearly as in *C. mæstus* (Dej.), shorter and broader than in *C. transfuga* (Chaud.), and are shorter than the width at the base. The upper surface is very dark brown, glossy, and with a brassy tinge, the under side with the elytral epipleuræ being lighter, almost tawny brown. The facies is that of certain species of *Platysma*. The posterior thoracic seta is apparently absent.

Colpodes omaseoides. (Pl. XIV., fig. 3).

Elongato-oblongus nullo modo ovatus, niger nitidus, antennis palpis et tarsis obscure rufis. Caput ovatum tumore post-oculari elongato postice angustato, sulco posteriori sat profundo; setis supra-orbitalibus duabus. Thorax quadratus, lateribus explanato-reflexis plus minusve rotundatis, interdum subcoardatus, post medium sub-sinuatum angustatus, angulis posticis breviter prominentibus, puncto setifero in margine ipso juxta angulum sito. Elytra postice convexa ad basin utrinque leviter arcuata, apud humeros subdentatim angulata, margine subapicali haud sinuato, parum profunde striata, interstitiis paullo convexis, tertio tripunctato. Metathoracis episterna brevia. Tarsi 4 postici lateraliter sulculati, omnes supra paullo depressi et sparse setosi, articulo 4to angulis paullo productis inæqualibus, 5to subtus ciliato. Antennæ minus elongatæ. Long. $11\frac{1}{2}$ — $12\frac{1}{2}$ millim., ♂ ♀.

Hab. Omilteme, in Guerrero, 8000 ft. (*H. H. Smith*). A good series of examples.

Although superficially so similar to *C. steropoides*, this species, as will be remarked on comparison of the descriptions, differs in numerous points of structure of high importance. The posterior tactile seta of the thorax is implanted on the thickened edge very near the hind angle, in which it produces a slight notch, as in many other species of *Colpodes*.

Colpodes valens. (Pl. XIV., fig. 4).

C. mæsto (Dej.) affinis, major robustior et magis politus. Ob-longo-ovatus haud elongatus, niger nitidus elytris cyanescentibus, palpis antennis et tarsis rufescentibus. Caput sat gracile ovatum.

Thorax late ovatus, angulis anticis prominentibus, posticis obtusissimis sed distinctis, margine basali prope angulum valde obliquato, lateribus explanato-reflexis ad medium rotundatis, ante basin leviter sinuatis. Elytra ovata, basi arcuato versus humeros ascendenti, humeris subacutis, apice obtuse rotundata paullulum sinuata; fortiter striata striis omnibus integris, interstitiis paullo convexis tertio tripunctato. Metathoracis episterna latitudine basali haud longiora. Tarsi 4 antichi articulo 4to brevissime bilobato, 2 postici angulis paullo productis inæqualibus; 4 postici utrinque sulculati dorso subcarinati; omnes articulo unguiculari subtus ciliato. Long. 13 millim., ♂ ♀.

Hab. Ciudad and Refugio, in Durango (*Höge*). Many examples.

Colpodes stenos.

C. lugens (Dej.) affinis; multo angustior, gracile oblongus supra depressus. Piceo-niger, palpis antennis et tarsis fulvo-rufis, supra sericeo-subopacus sed sæpe nitidus. Caput ovatum relative parvum nec sicut in *C. lugens* late ovatum. Thorax sat angustus quadratus, ante medium mediocriter dilatato-rotundatus, post medium sinuatus vix angustatus, angulis posticis exstantibus subacutis, seta posteriori juxta anguli apicem sita. Elytra elongato-ovata fere oblonga, depressa, striata striis hic illic subpunctulatis interstitiis paullulum convexis; apice oblique sinuata. Metathoracis episterna brevia, latitudine basali vix longiora. Tarsi 4 postici lateraliter sulculati, omnes articulo 4to lato angulisque obtuse paullo productis parum inæqualibus, articulo 5to subtus tum glabro tum parce ciliato. Long. 9—10 millim., ♂ ♀.

Hab. Toluca, Amecameca, in Morelos (*Höge*). A large series of examples.

In form and many points of structure intermediate between *C. lugens* and *C. semiopacus*, and closely allied to *C. Forreri* (Bates). The metathoracic epimera are decidedly longer and relatively narrower than in *C. lugens*, and the long and well-marked sinuation of the sides of the thorax and produced hind angles distinguish it from both species. The examples from Amecameca are generally of a deeper black than those from Toluca, the head and thorax being highly polished, and the elytra sometimes subopaque.

Colpodes tinctipennis.

C. mæsto (Dej.) affinis, thorace longius quadrato-cordato, etc. Niger, nitidus elytris plus minusve sericeo-opacis cæruleo-vel violaceo-tinctis; antennis et tarsis obscure fulvo-rufis palpis pallidioribus. Caput sat gracile ovatum, setis supraorbitalibus duabus. Thorace longe post medium sinuato-angustatus, angulis posticis rectis subacutis, puncto setifero in anguli apice sito. Elytra postice convexa subpunctulato-striata, interstitiis subplanis tertio tripunctato; plica basali utrinque arcuata versus humeros acutos ascendenti; apice oblique sinuata. Metathoracis episterna latitudine breviora. Tarsi articulo 5to subtus ciliati, 2 antici articulo 4to breviter bilobato, 4 postici articulo 4to triangulare angulis acutis. Long. 11—12 millim., ♂ ♀.

Hab. Ciudad and Refugio, in Durango (*Hoge*).

Distinguished from the numerous species of the *C. mæstus* subgroup, with sinuated sides and rectangular hind angles of the thorax, by the tactile setæ of the head and thorax being of the normal number, the elytra rather strongly convex behind (not depressed as in *C. stenos*), and the ciliated claw-joint of the tarsi. The elytra have a bluish or violaceous tinge, as in *C. Durangensis* and *C. Forreri*.

Colpodes rectilineus. (Pl. XIV., fig. 5).

C. sphodroidi (Chaud.) affinis; ab omnibus speciebus differt thorace anguste oblongo lateribus fere rectis. Piceo-niger, nitidus, partibus oris, antennis genibus et tarsis testaceo-rufis. Caput gracile ovatum, oculis haud prominentibus, seta supraorbiculari anteriori deficienti. Thorax capite vix latior, lateribus subrectis interdum medio perparum rotundatis ante basin sinuatis paullo reflexis; angulis anticis haud porrectis, posticis rectis, puncto setifero posteriori deficienti, anteriori ante medium sito. Elytra paullo convexa, ovata, exarato-striata, interstitiis fere planis tertio conspicue tripunctato, basi utrinque arcuata, apice fortiter oblique sinuata. Antennæ minus elongatæ articulo tertio cæteris multo longiori. Metathoracis episterna brevia subquadrata. Tarsi graciles, 4 postici lateraliter vix perspicue sulcata, omnes articulo 4to cæteris latitudine æquali, angulis inæqualiter productis. Long. 11 millim., ♂ ♀.

Hab. Omilteme, in Guerrero, 8000 ft. (*H. H. Smith*); Guerrero (*Baron*).

I have failed to discover any trace of the usual setiferous puncture at or near the hind angles of the thorax in the ten examples in hand of this species. The absence of this posterior puncture occurs in a few other Central American species, viz., *C. sphodroides*, *C. championi*, and others, of which I have examined a large number, and in which the anterior puncture is always present. In the allied Pacific genera, *Colpodiscus* and *Barypristus*, according to Dr. Sharp, their founder, the posterior puncture is present and the anterior absent, and in *Metro-nemus* (Sharp) both punctures are wanting. A more remarkable feature of *C. rectilineus* and *C. sphodroides* is the presence of only one supra-orbital seta, the number of setæ, one or two, being a character on which Dr. Horn founds his primary divisions of the main body of the *Carabidæ*.

Colpodes segregatus. (Pl. XIV., fig. 6).

C. chloreus (Bates) et *C. monacho* (Dej.) affinissimus, sed differt thorace ovato angulis posticis rotundatis. Læte viridis interdum elytris disco violaceis, antennis piceis partim rufescentibus, palpis et tarsis pallidioribus. Caput gracile ovatum collo paullo constricto. Thorax ovatus angulis posticis omnino rotundatis lateribus nullo modo sinuatis, puncto setifero in margine elevato a basi remoto. Elytra elongato-ovata, convexa, subpunctulato-striata, interstitiis planis interdum convexis. Metathoracis episterna medio-criter elongata et angustata. Tarsi 4 postici dorso bisulcati, anticorum articulo 4to angulis productis paullulum inæqualibus, 4 posticis triangularibus. Long. $12\frac{1}{2}$ —14 millim., ♂ ♀.

Hab. Cuernavaca (*Höge*).

Many examples of this species, or subspecies, were included in the series of *C. chloreus* obtained by Herr Höge at Cuernavaca. The totally different form of the thoracic hind angles (which in *C. chloreus* and *C. monachus* are nearly rectangular, preceded by a well-marked situation of the sides, and the setiferous puncture implanted close to the apex of the angle) is almost the only difference. The metathoracic episterna in most of the examples are decidedly shorter, but they are a little variable in length in *C. chloreus*. There are no intermediate forms in the series.

Colpodes Trujilloi.

C. fratello (Chaud.) affinis sed multo minor et minus elongatus. Capite et thorace nigro-æneis, illo parvo, oculis magnis haud vero valde prominentibus, hoc parvo quadrato lateribus anguste explanato-reflexis, ante basin paullulum sinuatis angulis posticis distinctis sed obtusis, margine basali prope angulum obliquo. Elytra saturate viridi-ænea, oblonga parum ovata humeris fere rotundatis angulis obtusissimis; apice longe sinuata, striata, striis versus apicem latius exaratis, interstitiis planis tertio tripunctato. Subtus niger; pedes nigro-ænei, coxis, trochanteribus, tarsis et antennis fulvopiceis, his fusco-maculatis; palpi fusci apice fulvi. Metathoracis episterna longissima. Tarsi graciles, lateraliter sulculati; 4 postici articulo 4to unilobato. Long. 8 millim., ♂ ♀.

Hab. Jalapa (*M. Trujillo*).

Colpodes æneicauda.

C. semirufo (Motsch.) et *C. inopi* (Chaud.) affinis. Major, supra piceo-niger politus, elytris obscure viridi-æneis versus apicem aurato-æneis, subtus fuscus femoribus nigro-piceis; antennis palpis thoracis lateribus et tarsis obscure fulvis. Caput parvum. Thorax trapezoidalis, disco transversim ruguloso, lateribus (cum angulis posticis) explanato-reflexis, angulis posticis subrectis (margine laterali ante angulum paullo rotundato). Elytra relative elongata et ampliata, apice suturali sublobato-producto, ante apicem lateribus fortiter sinuatis; exarato-striata, interstitiis planis, tertio tripunctato. Metathoracis episterna valde elongata. Tarsi plantis dense ciliatis, 4 antici articulo quarto brevissime bilobato, 2 postici triangulares, angulis acutis æqualibus. Long. 11 millim., ♂.

Hab. Xucumanatlan, in Guerrero, 7000 ft. (*H. H. Smith*); Guerrero (*Baron*).

Two male examples, one of them from Mr. Harford, taken by Mr. Baron in Guerrero.

Colpodes acutulus. (Pl. XIV., fig. 7).

C. variabili (Chaud.) affinis et similis, sed multo minor et differt palpis apice haud truncatis, articulo ultimo fusiformi apice acuminato etsi paullulum obtuso. Castaneo-fuscus, politissimus, elytris viridi-vel cupreo-æneis subtilissime et acute striatis, apice profunde sinuatis parte suturali sublobato-producta. Palpi, antennæ et pedes fulvo-rufa. Caput sat parvum collo subconstricto, oculis prominentibus post oculos sat subito angustatum. Thorax relative

parvus cordato-quadratus, transversus, lateribus explanatis rufo-translucentibus ante basin breviter sinuatis, angulis posticis exstantibus subacutis, reflexis. Elytrorum striæ apice nullo modo profundiores. Metathoracis episterna elongata, angustata. Tarsi gracillimi 4 antici articulo 4to paullo inæqualiter producto, 2 postici triangulares angulis paullo productis. Long. 8 millim., ♂ ♀.

Hab. Zacualtipan, in Hidalgo (*Höge*).

Colpodes columbinus, Chaud.

Herr Höge met with this insect at Jalapa.

Colpodes porrectus, Chaud.

We have received examples of this species from Omilteme, in Guerrero (*Smith*), and Amecameca, in Morelos (*Höge*).

Pogonus (Diplochætus) emaciatus.

Angustus, sublinearis, rufo-testaceus politus. Caput post oculos incrassatum. Thorax elongatus, postice gradatim angustatus, lateribus paululum rotundatis, ante basin leviter sinuatis, angulis posticis subrectis etsi baseos versus angulum obliquo, fovea utrinque magna lævi, carinula ab angulo suboblique versus discum extensa. Elytra parallela, sed prope humeros paullo rotundato-angustata, basi thoracis latiora, margine basali interrupto carina valida ab humeri basi usque ad interstitium 5um curvata; sat fortiter punctulato-striata, striis (4ta, 6ta et 7ma exceptis) usque ad basin impressis, duabus marginalibus multo latioribus et longe ante basin conjunctis; interstitiis convexis 3io unipunctato raro bipunctato. Long. 6—6½ millim.

Hab. Mazatlan (*Höge*).

This species seems to be distinct from *P. rutilus* (Chevr.) and *P. parallelus* (Lec.), both belonging to the genus or subgenus *Diplochætus*, the descriptions of which specially mention that the elytral striæ are obliterated at the base, and do not fit the Mazatlan insect in other respects. *P. rutilus* is from Cuba, Colombia, and Venezuela, *P. parallela* is from Texas. *P. depressus* (Lec.), which has the curved humeral carina distinctive of the *Diplochætus* group, differs from our insect in being "strongly depressed," and in having three dorsal punctures.

The genus *Pogonus* is an addition to the Mexican fauna.

Tachys (Barytachys) decastichus.

T. duplex (Bates) affinis et similis, sed differt inter alia colore supra saturate viridi-æneo. Antennarum articuli 2 basales palpi et mandibulæ pedesque pallide rufo-testacea, corpore subtus nigro-æneo prosterni lateribus interdum castaneis. Thorax transversus antice valde rotundato-dilatatus post medium sinuatim angustatus ante angulos lateribus rectis angulisque postice subacutis; sulco basali lævi fovea utrinque profunda carinulaque obliqua juxta angulum. Elytra convexa punctato-striata, striis utrinque quinque suturali haud profundiori, 2—5 ante apicem abbreviatis (5a perparum abbreviata) spatiis apicali et laterali lævissimis, stria 3ia grosse bipunctata, puncto primo ante, secundo post, medium, striola recurva recta obliqua. Long. 2½ millim.

Hab. Teapa, in Tabasco (*H. H. Smith*).

Pericompsus Tabasconus.

P. stictico (Bates) affinissimus, at differt semper elytrorum maculis majoribus primaque (subhumerali) usque ad striam 3iam vel 4tam extensa. Nigro-æneus antennarum articulis 1—3 partibus oris pedibusque flavo-testaceis. Gracile ovatus. Thorax parum transversus antice medioeriter rotundatus, angulis posticis subacutis. Elytra convexa, utrinque striis punctulatis sex, exterioribus ante apicem abbreviatis, interstitio 3io bipunctato; macula flava subhumerali a margine laterali (ibique lata et elongata) usque ad striam 3iam vel 4tam extensa, macula apicali magna obliqua. Long. 2½ millim.

Hab. Teapa (*H. H. Smith*) and San Juan Bautista (*Höge*), in Tabasco.

There is no difference that I can detect between this species and the Guatemalan *P. sticticus*, except in the dimensions of the yellow elytral spots, which in the latter are much smaller, the anterior one narrow and confined to the marginal interstice. It is, however, constant in its difference throughout a large series of examples, and merits a distinguishing name, if only as a local variety.

Bembidium sphærulifer.

B. Championi simile, æneum politum elytris utrinque 7-striatis stria septima brevissima; differt antennis 5—11 et 4to apice nigro-

fuscis, articulis basalibus palpis et pedibus rufo-testaceis, tarsis infuscatis. Thorax sicut in *B. Championi*, *B. sphaerodero* et affinis latus, sphaeroidalis; elytris sat grosse punctato-striatis, striis 2—7 gradatim brevioribus. Long. $3\frac{3}{4}$ —4 millim.

Hab. Ventanas and Ciudad, in Durango (*Höge*).

Two examples only. These, *B. sphaeroderum* and *B. Championi*, are so closely allied that they may hereafter prove to be only modifications of one variable species.

Bembidium (Peryphus) macrogonum.

B. mexicano (Dej.) proxime affine, sed differt thoracis angulis posticis prolongatis exstantibus carinulaque rectiori usque ad basin (juxta angulum) extensum. Cyaneo-viride politum, antennarum articulis 1—2, palpis ad basin pedibusque flavo-testaceis (tibiis paullo obscuris), elytris prope apicem macula obliqua transversa rufo-testacea. Thorax antice sat late rotundatus lateribus ante basin valde sinuatis, angulis posticis exstantibus, basi dilatata latitudini majori anteriori fere æquali, sulculo marginali laterali angusto usque ad angulum posticum ducto carinulaque recta. Elytra dorso planata, striis punctulatis sex interioribus (præcipue in individuis minoribus) usque prope apicem impressis. Long. $5\frac{1}{2}$ —6 millim.

Hab. Cordova, in Vera Cruz (*Höge*). Five examples.

Bembidium (Peryphus) erosum, Motschulsky, Bull. Mosc., iii., 127; *Mannerheimii*, Leconte, Ann. Lyc. N. York, v., 190.

Hab. Chihuahua City (*Höge*); Paso del Norte (*Flohr*); NORTH AMERICA; California.

A large series of examples offering very little variation in markings or in size ($8\frac{1}{2}$ millim.), and differing in no essential respect from Californian representatives of the species. It resembles very closely large examples of *B. mexicanum* var. *Sallei*, in which the elytra have a large humeral reddish spot, or the colouring is spread over the whole base of the elytra, a form which occurs in Oaxaca, near Mexico City, and in the same locality as *B. erosum*, viz., Chihuahua City. *B. erosum* may, however, be distinguished by the shallower fovea and thickly punctured base of the thorax, and the absence of all trace of the short oblique carina near the hind angle, which, though sometimes very faint, is never

entirely wanting in *B. Sallæi*. The species is an addition to the Mexican fauna.

Bembidium (Peryphus) ciudadense.

B. erosum (Motsch. = *B. Mannerheimi*, Lec.) differt thorace late rotundato, etc. Caput et thorax nigro-ænea, elytris castaneorufis, vitta lata (interdum latissima) suturali (in individuis immaturis deficienti) nigricanti, palpis antennis et pedibus obscure rufotestaceis femoribus subtus infuscatis, corpore subtus cum coxis piceo-nigro. Caput lævissimum sulcis frontalibus latis profundis. Thorax late cordatus antice late ampliato-rotundatus postice sat valde angustatus, lateribus ante angulos subacutos sinuatis; supra toto lævis, politus, sulculo marginali-laterali angusto usque ad angulos et foveam parvam basalem continuato, carinula nulla, spatio inter foveam et angulum subconvexo lævi. Elytra elongato-oblongo-ovata, utrinque striis punctatis medioeriter impressis sex, 2—6 am versus apicem fere obsoletis. Long. 8 millim., ♂.

Hab. Ciudad, in Durango (*Hoge*).

Many examples, but nearly all immature. One was sent to me by Mr. Flohr with insects from the neighbourhood of Mexico City; I have it so labelled in my collection, but strongly suspect it has been referred to that locality by mistake.

Bembidium lævigatum, Say, Trans. Am. Phil. Soc.,
ii., 84.

Paso del Norte, Chihuahua (*Höge*).

An addition to the Mexican fauna.

Bembidium Durangoense.

B. nitidulo (Dej.) valde affine; differt inter alia femoribus viridi-æneis. Subtus splendide viridi-æneum supra æneo-cupreum minus nitidum, antennarum articulis 1—3 et 4to basi rufotestaceis cæteris nigris, femoribus ad basin (cum trochanteribus) tibiis tarsorumque articulo basali (cæteris nigro-fuscis) testaceis. Caput sulcis frontalibus rectis subangustis. Thorax subquadratus medio perparum rotundato-dilatatus antice gradatim, postice minus et sinuatim angustatus, angulis posticis exstantibus acutis. Elytra oblongo-ovata passim sat grosse subrenatim punctato-striata interstitiis paullo convexis æqualibus 3io punctis medioeribus duobus. Elytrorum striæ 8—9 arcte approximatae. Long. 6—6½ millim.

Hab. Villa Lerdo, in Durango (*Höge*).

From *B. coxendix* (Say), a species belonging to the same subgroup of *Bembidium*, our species differs in the conspicuously longer and narrower thorax. In colours and sculpture there is little difference.

Anchonoderus fulvipennis.

A. subtili (Bates) affinis. Nigro-æneus, elytris (cum epipleuris) castaneo-fulvis apice late, et interdum lateribus, nigris; antennis (versus apicem obscurioribus) palpis pedibusque rufo-testaceis. Oculis sicut in *A. subtili* et *aneicolli* magnis prominentibus. Caput fere læve, nitidum, collo leviter constricto, inter antennas breviter et late bisulcatum. Thorax relative parvus, cordatus post medium angustatus ante angulos parvos reflexos breviter sinuatus, margine basali versus angulos obliquato; indistincte rugulosus parum nitidus dense erecte pubescens. Elytra oblonga acute punctulato-striata, interstitiis planis, subtiliter punctulatis, erecte pubescentibus. Long. $6\frac{1}{2}$ — $7\frac{1}{2}$ millim.

Hab. La Noria, in Sinaloa (*Höge*).

A remarkable species, in its style of coloration unlike any other known of the genus. The elytra have no trace of foveæ.

Lachnophorus cuprellus.

L. subaurato (Bates) proxime affinis; differt thorace fere lævi, etc. Nigro-æneus, capite thoraceque lætius æneis elytris subcupreis sat nitidis; antennis nigro-fuscis articulis 1—4 (apicibus fuscis exceptis) femoribusque flavo-testaceis, tibiis et tarsis fusco-nigris. Caput punctulatum et strigulosum, collo lævi. Thorax parvus cordatus mox pone angulos anticos ampliatus deinde valde angustatus, parte basali cylindrica, supra vage subtiliter rugosus sed haud punctatus. Elytra anguste oblonga, exarato-striata, striis versus basin crenato-punctatis, interstitio 3io trifoveato. Long. 5 millim.

Hab. La Noria in Sinaloa, and Ventanas in Durango (*Höge*). Three examples.

Closely allied to the Guatemalan *L. subauratus*, but certainly distinct; the elytra are more narrowly oblong and less convex, the thorax much more narrowly cordate and narrowed more gradually behind, the straight sides for a short distance before the base being the same; the surface is not coarsely confluent-punctate, as in

L. subauratus; the head is more closely punctured, the punctures in *L. subauratus* being few and large, and, on the other hand, the interstices are smooth, so that the surface is more brilliant. The antennæ in *L. subauratus* are much stouter, and, with the legs, are fulvous.

Casnonia sulcicollis. (Pl. XIV., fig. 8).

C. pictæ et *C. pennsylvanicæ* affinis. Multo minor et minus gracilis. Nigra, polita, elytris cærulescentibus immaculatis, antennis articulis 2—3 et 4to ad basin, rufis, pedibus flavo-testaceis, femoribus tibiisque ad apicem et tarsis fuscis. Caput et oculi sicut in *C. pennsylvanica* illud sat paullo minus elongatum. Thorax paullo brevior, convexus, ad medium gracile ovatus prope apicem leviter constrictus angulis anticis productis acutis; sutura pronoti utrinque a supra perspicua sulciformi, prosterno grosse punctato. Elytra a basi usque ad paullo ultra medium grosse striato-punctata, triente apicali lævissima. Long. 6½ millim.

Hab. Ciudad, in Durango (*Höge*).

Mr. Flohr has also sent us examples of this distinct species from the same locality.

Casnonia lioptera.

C. tetrastigmæ (Chaud.) et *C. lineolata* (Bates) affinissima; differt elytris callo præapicali carentibus, etc. Gracilis, nigro-polita, antennis articulis 2—4 rufis, 8—9 testaceo-albis, femoribus dimidio basali (cum trochanteribus posticis) tibiisque annulo mediano, albis; elytris utrinque macula unica (laterali prope apicem) testaceo-alba. Caput lævissimum antice convexus, post oculos prominentes elongatum rectilineatim angustatum, collo brevissimo. Thorax elongatus, angustus, usque longe post medium gradatim leviter dilatatus, perparum subtiliter transverse striatus, sutura prosternali tenuissima. Elytra angusta oblonga, angulis exterioribus apice sat productis; lineis punctorum abbreviatis prope basin exceptis fere lævia, sed striis punctulatis, dorsalibus tenuissimis sub lente (juxta maculam præapicalem profundioribus) perspicuis; fovea utrinque magna prope basin; callo apud maculam præapicalem nullo. Long. 9½ millim.

Hab. Atoyac, in Vera Cruz (*Flohr in coll. Bates*).

Höge's collections do not contain this species, which might be considered a variety of *C. tetrastigma* (Chaud.) were it not for the absence of præapical callus, which is

so conspicuous a feature in that and other allied species; the interstice covered by the whitish spot near the apex is nearly quite plane in *C. lioptera*. The short rows of punctures near the base are much smaller than in *C. tetra-stigma*, though the punctured striæ on the rest of the surface are much more clearly indicated. The external apical angles are more produced, but do not form long tooth-like projections, as in *C. rufipes*.

Galerita ovalipennis. (Pl. XIV., fig. 9).

G. Boucardi, Chaud., quoad formam simillima, differt antennis palpis et pedibus rufis. Nigra-obscura opaca breviter erecte fulvo-pubescentis, genis post oculos sat late et breviter rotundatis. Thorax sat elongatus quadratus, ante medium mediocriter rotundato-dilatatus deinde longo sinuatus et parum angustatus, angulis posticis oblique productis et subelevatis. Elytra relative brevia, convexa valde costata, lineis geminatis in sulcis vix elevatis lineam punctorum includentibus, humeris omnino rotundatis. Long. 17 millim.

Hab. Soledad and Xantipa, in Guerrero (*H. H. Smith*). Two examples.

Galerita Lecontei, Dejean, Sp. Gén., v., p. 294.

Hab. Villa Lerdo, in Durango (*Höge*).

This species has been added to the Mexican fauna by Herr Höge, from whom we have two or three examples resembling Texan specimens of *G. Lecontei*.

Zuphium punctipenne.

Z. mexicano (Chaud.) simile, minor, et differt elytris una cum thorace conspicue sat dense punctatis. Parvum depressum, supra toto erecte pubescens, fulvo-testaceum subnitidum capite apiceque elytrorum interdum infuscatis. Caput sparse punctatum politum; thorax quam in *Z. mexicano* brevior, antice subrectus angulisque distinctis etsi obtusis nec ut in *Z. punctipenni* rotundatis, lateribus post medium valde sinuatis angulis posticis exstantibus acutis, basi medio lobato, supra subdense conspicue punctatus. Long. 5 millim.

Hab. Cuernavaca (*Höge*). Five examples, among a small series of *Z. mexicano* from the same locality. The thorax is more strongly punctured than in *Z. mexi-*

canum, and the elytra, instead of being finely alutaceous, are punctured throughout, without tendency to confluence, nearly as strongly as the thorax. The short basal lobe of the thorax is quadrate, its sides forming a nearly right angle with the portion of the base near the angle.

Diaphorus rufulus, Leconte, Ann. Lyc. N. York, v., 173
(*Enaphorus*, id.).

Hab. Teapa, in Tabasco (*H. H. Smith*).

A single example which, though it agrees with Leconte's description as far as it goes, I refer with doubt to this species. The locality of his specimens was St. Jose, California.

Inna planipennis. (Pl. XIV., fig. 10).

I. Boyeri (Chaud.) affinis, sed major elytris deplanatis, etc. Rufo-picea subnitida supra obscurior elytrisq. subviridi-metallicis, margine explanato rufo-translucenti; antennis et palpis rufo-testaceis. Caput elongatum, exsertum, media fronte cum vertice fere lævibus sparse subtiliter punctulatis, collo transversim grosse et densius punctato. Thorax medio angulatim dilatatus antice paulo curvatim postice sinuatim angustatus, antice arcuatim emarginatus, postice fere truncatus, lateribus explanato-reflexis, rufo-translucentibus, margine irregulariter serrato quasi eroso angulis posticis rectis; supra grosse subconfluenter punctatus. Elytra oblongo-quadrata, depressa, costis utrinque septem medio-criter elevatis (suturali inclusa) hic illic planatis punctulatis, interstitiis versus basin biserialim, apicem versus et lateribus confuse, pluri-punctatis. Long. 8½—11 millim., ♂ ♀.

Hab. Temax, North Yucatan (*Gaumer*); Jalapa (*H. Edwards*).

Var. Thorax angustior lateribus haud angulatis margineque reflexo angustiori; capite supra adhuc læviori.

Hab. Teapa, in Tabasco.

M. Sallé has favoured me with an example of this species, which he has also received from Yucatan. The punctuation of the interstices of the elytra varies in the different examples; in some the small punctures in the middle of the interstices begin near the base.

I. costulata (Chaud.) has also been received from Mr. Gaumer from Temax, the specimens differing in no essential respect from those taken at Bugaba, in the

State of Panama, by Mr. Champion. It is a smaller and narrower insect, with the head strongly punctured throughout, and the sides of the thorax rounded with but slight angularity.

Brachinus amplipennis.

B. mexicano (Dej.) quoad formam similis, sed major elytrisque relative latoribus. Fulvo-aurantiacus, elytris viridescenti-cæruleis, antennis articulis 3io vel 4to leviter infuscatis; subtus episternis posticis ventrisque lateribus nigrescentibus. Caput post oculos gradatim fere recte angustatum, collo hand constricto, setifero-punctatum vertice parum convexo lævi. Thorax anguste cordatus quam in *B. mexicano* planior, margine laterali (a latere viso) multo minus arcuato; versus basin plus minusve profunde sinuatus angulis posticis exstantibus, supra dense erecte pilosus nec rugulosus. Elytra mediocriter convexa, obtuse carinata (carinis lævibus, versus latera et apicem obsoletis) interstitiis pilifero-pluripunctulatis. Antennæ longitudine mediocres. Long. 11—14 millim.

Hab. Villa Lerdo, in Durango; Paso del Norte in Chihuahua, Tampico in Tamaulipas (*Hoge*).

In real affinity, and especially in the sculpture and pubescence of the thorax, this species belongs to the North American group, of which *B. fumans* is the type. Though similar in form to the larger examples of *B. mexicanus*, it differs widely from that species, and from all the Mexican species hitherto described, except *B. hirsutus* (Bates), in the densely hairy thorax, which, in the other species, shows only a few hairs towards the anterior angles. *B. mexicanus* differs besides in the blackish antennal joints 3 to 4, in the black abdomen, reddish only in the middle of the base, and in the more convex elytra and more strongly raised carinæ and glabrous interstices. *B. hirsutus* is smaller than *B. amplipennis*, with shorter and broader thorax and more acutely carinated elytra.

Brachinus Tabasconus.

B. amplipenni affinis et similis; differt solum elytris disco et basi fere glabris interstitiis uniseriato- vel pauciter-punctulatis. Long. 12—14 millim.

Hab. Juan Bautista in Tabasco; Tlacotalpam in Vera Cruz (*Höge*).

The description above given of the northern *B. amplipennis* will apply to this form from the opposite extremity of Mexico, with the exception that the elytra, instead of having a large number of piliferous punctures in the interstices, have only an irregular row of mostly glabrous punctures, at least in the interstices 1—6 from the base to about the middle. The punctures are destitute of hairs towards the base, and hence the elytra are more glabrous and shining; their colour also is generally greener than in *B. amplipennis*. The thorax is somewhat elongate, and varies in outline, as in the other species, and its surface is densely clothed with piligerous punctures.

In one or two examples of the series before me the interstitial punctures are not uniseriate, but irregularly two or three abreast; these form transitions to *B. Tabasconus*, and the form can scarcely be considered as more than a local variety of that species. Transition varieties are, however, very frequent in the genus *Brachinus*.

Brachinus cognatus, Chaud., Monogr. d. Brachyn., p. 64.

The typical form of *B. cognatus* in Southern and East-central Mexico has short convex elytra, with strong glossy carinæ and smooth interstices; the whole under surface being pale red, like the head and thorax. A character omitted by Chaudoir is the absence of hairs from the surface of the thorax and elytra; viewed laterally, no trace of pilosity is visible. The following variety is from Northern Mexico; it agrees with the type in every respect, except as stated in the following diagnosis:—

Var. *cancellatus*. Elytra longius ovata, convexa, carinis elevatis, angustioribus interstitiisque transversim impressis; antennis articulo 4to 3ioque basi fuscis. Long. 7—8 millim.

Hab. Aguas Calientes City; Villa Lerdo, in Durango; Chihuahua City (*Höge*).

In two examples only, respectively from Lerdo and Chihuahua, are the transverse impressions of the elytral interstices strongly marked; but they agree with the others, in their subelongate form and other characters, from Aguas Calientes.

Coptodera xanthopleura.

C. aurata (Chevr.) affinis et similis, sed differt colore viridi-æneo minus nitido, præcipue elytris obscurioribus margine explanato laterali epipleurisq[ue] fulvis, interstitiis convexis. Caput et thorax sicut in *C. aurata*, viridi-ænea polita, hic valde transversus, postice angustatus sed lateribus haud sinuatis; antennis pedibusq[ue] rufis illis articulis 5—11 obscurioribus. Elytra paullo brevius oblonga, obscurius viridi-ænea, subpunctulatim striata interstitiis convexis, margine laterali explanato epipleurisq[ue] fulvo-testaceis. Pedes piceo-fulvi femoribus cum corpore subtus nigris. Long. 8½ millim.

Hab. Tehuantepec (Sallé); Dos Arroyos, in Guerrero (H. H. Smith).

An example of this species was overlooked by me in the series of *C. aurata* in the Sallé collection. Mr. Smith has since obtained one exactly similar in the State of Guerrero.

Cymindis pilosa, Say, Trans. Am. Phil. Soc., ii., p. 10 (1823); *C. pubescens*, Dej., Sp. Gén., i., 215.

Hab. Cholula, in Puebla (Höge).

One example, which I cannot distinguish from specimens of *C. pilosa* from the Eastern States of N. America. The species is an addition to the Mexican fauna.

Pinacodera atrata, Chevr., Biol. Centr.-Am., Col., i., 1, p. 187.

All the numerous examples taken by Mr. H. H. Smith at Omilteme and Xucumanatlan, in Guerrero (alt. 7—8000 ft.), have rather clear reddish antennæ and palpi, and very many have all the trochanters and tarsi of the same colour. The outline of the thorax and strength of the punctuation of the upper surface vary, but the latter is generally greater than in the typical *P. atrata* from Mexico City. A more universal point of difference is the reddish antennæ. The variety may be distinguished as follows:—

Var. *ruficornis*. Antennis, palpis et interdum trochanteribus tarsisq[ue] rufis. Long. 9—14 millim.

Another variety of this variable species is distinguished by the almost impunctate upper surface:—

Var. *lævior*. Supra subtilissime et sparsim punctulata vel toto lævis, elytris politis, striis subtilibus et subtiliter punctulatis; antennis et palpis rufescentibus.

Hab. Huitzo, in Oaxaca (*Höge*). Many examples.

Apenes hilariola. (Pl. XIV., fig. 11).

A. pallidipe affinis; minor et gracilior, elytris nitidulis fusco-æneis, etc. Caput et thorax rufa, illo utrinque post oculum, hoc vitta indistincta utrinque discoidali, fuscis, capite supra sat dense subtiliter flexuoso-ruguloso et punctulato. Antennæ nigro-fuscae articulis 1—2, 3tioque basi rufis. Thorax capite latior, quam in *A. pallidipe* longior, lateribus minus arcuatis; totus transversim strigulosus et subtiliter punctulatus. Elytra subtilissime alutacea sed sat nitida punctulato-striata, fusco-ænea, humeris et margine laterali late, vitta brevi supra interstitium 6um apice intus supra interstitia 4 et 5um prolongata, fasciaque late undulata præapicali, flavo-testaceis. Pedes flavi geniculis infuscatis. Subtus rufo-polita lateribus ventrisque dimidio apicali fusco-nigris. Long. 9 millim.

Hab. Cuernavaca, Colima City (*Höge*; *Flohr in coll. Bates*).

Two examples only. The base of the elytra is dark bronze from the suture to the 6th stria, with the exception of the outer half of the interstice divided by the scutellar striole, which is reddish. The præapical fascia is composed of rather long spots on interstices 3—7, the 8th—10th interstices being occupied by the marginal vitta.

Apenes amplicollis. (Pl. XIV., fig. 12).

Major et latior, nigro-fusca, pedibus flavo-testaceis, antennisque obscure rufo-testaceis scapo pallidiori. Caput sicut in *A. pallidipe* ovatum, oculis parum prominentibus, supra totum dense punctato-strigulosum. Thorax latus paullo transversus dense punctulatus et transversim strigulatus, subnitidus, lateribus præcipue antice rufo-translucentibus. Elytra latius oblonga acute exarato-punctulato-striata, interstitiis planis, disperse punctulatis et alutaceis sericeo-opacis, margine laterali explanato grossius punctato; utrinque maculis duabus aurantiacis 1ma majori humerali apud interstitia 6—8, 2da præapicali minor apud interstitia 5—8, maculis interdum subobsoletis. Subtus fusco-nigra, nitida. Long. 11—12 millim.

Hab. Ventanas, in Durango (*Höge*); Tepic (*Flohr in coll. Bates*).

Larger and broader than any other described species of the *A. pallidipes* group, resembling more *A. omostigma* and *A. purpuripennis* of Chaudoir's group "Apenes ingenuæ," from which it differs in the narrower and more oval head.

XENODROMIUS, nov. gen.

Gen. *Axinopalpo* (Lec.) affinis, a quo differt unguibus simplicibus elytrisque versus basin angustatis humerisque rotundatis. Caput exsertum post oculos subrecte prolongatum paullo angustatum, oculis parum prominentibus. Palpi articulo apicali in maxillaribus gracile fusiformi subacuminato, in labialibus ovato obtuse truncato. Antennæ elongatæ dimidium elytrorum attingentes versus apicem gradatim crassiores, articulis 1—2 et 3ii dimidio glabris. Thorax cordatus ad apicem capite multo latior, angulis anticis paullo porrectis, mox pone apicem rotundato-dilalatus deinde sinuatim valde angustatus angulis posticis distinctis sed obtusis, margine basali versus angulum valde obliquo. Elytra plana, subovata, versus basin angustata apice latissime rotundata subtruncata, angulis humeralibus omnino rotundatis, plica basali brevi profunde sinuata; poris marginalibus magnis a supra conspicuis, epipleuris longe ante apicem terminatis. Setæ supra-orbitales duo. Metathoracis episterna brevia subquadrata. Tarsi sat robusti, articulo 4to unguibusque simplicibus.

Axinopalpus humeralis, Solier (*Variopalpis*, id.), has a similar exserted head, but differs in its oblong-quadrate elytra, like all other species of the same genus. With regard to the form of the thorax, *Axinopalpus brevicollis*, Germ., and *A. brunneus*, Chaud., approach closely our new genus. In the form of the head and elytra, *Xenodromius* recalls forcibly the *Brachinus* type.

Xenodromius Flohri. (Pl. XIV., fig. 13).

Deplanata, glabra, rufo-testacea polita, elytris (epipleuris rufis exceptis) castaneo-fuscis, striatis, striis perparum impressis vage punctatis. Long. 4—4½ millim.

Hab. Las Vigas (*Flohr in coll. Bates*). Two examples, apparently female, the anterior tarsi not being dilated.

Calleida chlorotænia. (Pl. XIV., fig. 14).

C. circumcinctæ (Bates) affinissima, sed differt thorace ante medium late rotundato geniculis nigris, etc. Minus elongata, subdepressa, fulva nitida, antennis articulis 3—11, palpis (apice pallido excepto) genubus tarsisque nigris; elytris vitta angusta marginali splendide viridi, ab humero fere usque ad apicis angulum exteriorem extensa et interstitia 8—9 tegenti (postice interdum angustiori). Thorax latus, ante medium late rotundatus postice perparum vix sinuatim angustatus, angulis posticis subrectis, lateribus late explanato-reflexis et punctatis plicaque crassa curvata cum margine laterali parallela transversim strigosa. Elytra acute punctato-striata, interstitiis planis sparsim punctulatis, 3io poris duabus 1mo prope basin 2do prope apicem. Long. 9 millim.

Hab. Acapulco (Höge).

In *C. circumcincta* the thorax has a similar curved fold, or wheal, near to the explanated lateral margin, but the thorax is narrower, the sides scarcely curved from the middle to the fore angle, and strongly sinuated behind; the outline, however, varies considerably in *C. chlorotænia*. The legs also are concolorous, rufous.

Loxopeza calomicra.

Parva, angustula, rufa polita, elytris, epipleuris (cum margine tenui) plicaque basali rufis exceptis, læte viridi-æneis. Caput læve. Palpi articulo penultimo ultimoque basi nigris; antennæ articulis 5to—11mo, 4toque apice nigro-fuscis. Thorax transversus versus apicem sat late rotundatus, lateribus late explanatis disco vix ruguloso. Elytra sat anguste oblonga, acute striata interstitiis versus basin convexis postice planioribus. Venter nigro-piceus. Long. 5½ millim.

Hab. Acapulco (Höge).

Two examples only, both females. The emarginate and not bilobate penultimate tarsal joints, added to the coloration, are almost sufficient to show that this species belongs to the genus *Loxopeza*, but it is only on the examination of the anterior tarsi of the male that its true position can be decided. It is smaller and slenderer than *L. atriceps*; the elytra are brassy green.

Lebia Smithiella.

L. quadricolori (Chaud.) affinis, sed elytris distincte etsi haud acute striatis. Oblonga, capite et elytris læte viridi-cyaneis metallicis,

thorace toto, pedibus, antennarum articulis 1—3 et 4ti basi (cæteris fuscis) rufis, meso- et metasternis, palpis, abdomineque nigro-viridibus. Caput breve, convexum, læve, oculis magnis prominentibus. Thorax capite parum latior, quadratus paullulum transversus, ante medium paullo rotundatus postice perparum sinuato-angustatus, margine laterali mediocriter (postice latius) explanato-reflexo. Elytra subtiliter alutacea sericeo-opaca, apice flexuoso-truncata, subtiliter haud acute striata. Long. 6 millim., ♂ ♀.

Hab. Chilpancingo, 4600 ft., Amula, 6000 ft. (*H. H. Smith*).

Allied to *L. quadricolor* (Chaud.), from which it is conspicuously distinct in the explanated lateral margins of the thorax. This and its coloration gives it a great resemblance to the smaller *Loxopezæ*, especially *L. atriceps* (Lec.); the transversely truncated apices of the dilated anterior tarsi in the males show, however, that it does not belong to that genus, but to *Lebia*.

Lebia furcata, Leconte, Ann. Lyc. N. York, iv., 193.

Hab. Teapa, in Tabasco (*H. H. Smith*).

One example of this N. American species, agreeing with numerous specimens from Utah and Montana, with which I have compared it, was obtained by Mr. Smith. *L. furcata* is an addition to the Mexican fauna.

Agra pacifica.

A. ictinæ (Bates) proxime affinis, forsân ejus varietas geographica. Gracilis, fusco-nigra ænescens, elytris obscure cupreis. Caput post oculos mediocriter prolongatum, rotundato-angustatum occipite medio fovea vaga elongata lateribus utrinque 2—3 punctatis. Thorax mediocriter elongatus lateribus rotundatis, prope apicem tantum angustatus ad basin paullo constrictus, crebrius grosse punctatus, linea dorsali lævi interdum interrupta, linea utrinque discoidali irregulari. Elytra angusta postice perparum ampliata acute punctulato-striata, interstitiis planis 2ndo 4to et 6to poris setiferis parvis 6—8, apice flexuoso-truncata; epipleuris rufescentibus æneo-tinctis, margine superiori interdum viridi-æneo. Prosternum toto grosse punctatum.

♂. Metasternum ventrisque segmenta 1—4 medio, tenuiter punctulato-pilosa; femoribus trochanteribusque glabris. Segmentum apicale ventrale medio incisum. Tibiæ 4 posticæ intus versus apicem pilosæ.

♀. Sterna et venter glabra. Segmentum apicale leviter angulatum emarginatum. Antennæ articulo 8vo nullo modo abbreviato. Long. 15—16 millim.

Hab. Acapulco (*Höge*). Seven examples.

Closely resembling *A. ictina*; differing, in both sexes, chiefly in the flatter elytral interstices, with finer and more sharply incised striæ and rather smaller but very conspicuous setigerous pores, and, in the ♂, by the less dense and more limited pubescence of the under surface, which in *A. ictina* extends to the coxæ and trochanters. The description of *A. ictina* applies to the Guatemala specimens, those from Cordova (I have only a ♀ example before me) being in some respects intermediate between *ictina* and *pacifica*. One or two setigerous pores are found on the 6th interstice in *A. ictina*, but they are usually more numerous in *A. pacifica*.

Agra cyanippe.

A. elainæ (Bates) similis. Angusta supra et subtus viridicyanea, capite antennis tibiis et tarsis nigrioribus. Caput angustum lævissimum, post oculos valde elongatum et vix angustatum angulis posticis rotundatis. Thorax fere linearis prope apicem sat subito angustatus, lineatim grosse punctatus, linea irregulari angusta dorsali lineisque discoidalibus utrinque latioribus, lævibus, prosterno lateribus grosse punctatis. Elytra medioeriter angusta pone medium læviter ampliata, apice recte truncata, angulo exteriori subacuto sed non producto, suturali recto subobtusato; profunde punctato-striata (striola scutellari dilatata) poris setigeris in striis 2nda et 4ta sitis haud conspicuis. Antennæ articulo 8vo abbreviato, ♀. Long. 14 millim.

Hab. Yautepec, in Morelos (*Flohr in coll. Bates*).

One example only.

For a list of the new and additional species and new varieties of *Cicindelidæ* and *Carabidæ* added to the Mexican fauna in this and the preceding paper (Trans. Ent. Soc. Lond., 1890, pp. 493—510), see pp. 276 and 277; and for an Explanation of Plates XIII. and XIV., see p. 278.

The following is a list of the new and additional species and new varieties of *Cicindelidæ* and *Carabidæ* added to the Mexican fauna in this and the preceding paper (Trans. Ent. Soc. Lond., 1890, pp. 493—510):—

<i>Cicindela obsoleta</i> , Say, var. <i>santa-clarae</i> , Bates (Trans. Ent. Soc. Lond., 1890, p. 493).	<i>Pasimachus duplicatus</i> , Lec., p. 230.
<i>C. thalestris</i> , Bates, p. 494.	<i>P. ignicinctus</i> , Bates, p. 230.
<i>C. scotina</i> , Bates, p. 494.	<i>P. levisulcatus</i> , Bates, p. 231.
<i>C. viatica</i> , Chev., var. <i>nigri-labris</i> , Bates, p. 495.	<i>P. quirozi</i> , Flohr, p. 231.
<i>C. melania</i> , Bates, p. 495.	<i>P. mexicanus</i> , Gray, var. <i>cæruleus</i> , Bates, p. 231.
<i>C. ritteri</i> , Bates, p. 496.	<i>P. Smithi</i> , Bates, p. 232.
<i>C. plurigemmata</i> , Bates, p. 496.	<i>Scarites durangoensis</i> , Bates, p. 232.
<i>C. rugatilis</i> , Bates, p. 497.	<i>Distichus gramulipygus</i> , Bates, p. 232.
<i>C. præcisa</i> , Bates, p. 498.	<i>Schizogenius multisetosus</i> , Bates, p. 233.
<i>C. guerrerensis</i> , Bates, p. 499.	<i>Scythropasus nicaraguensis</i> , Bates, p. 234.*
<i>C. specularis</i> , Bates, p. 500.	<i>Micrixys distinctus</i> , Lec., p. 234.
<i>C. punctulata</i> , Fabr., var. <i>chi-huahuae</i> , Bates, p. 500.	<i>Chlænienus chrysopleurus</i> , Chaud., var. <i>guerreroensis</i> , Bates, p. 235.
<i>C. politula</i> , Lec., p. 501.	<i>C. cordifer</i> , Bates, p. 235.
<i>C. dugesi</i> , var. <i>calomicroa</i> , Bates, p. 501.	<i>C. porphyrius</i> , Bates, p. 236.
<i>C. deliciola</i> , Bates, p. 502.	<i>C. eurybates</i> , Bates, p. 236.
<i>C. rufiventris</i> , Dej., var. <i>ventanasa</i> , Bates, p. 503.	<i>C. beatus</i> , Bates, p. 237.
<i>C. nebuligera</i> , Bates, p. 504.	<i>C. ampliatus</i> , Bates, p. 237.
<i>C. flavo-punctata</i> , Chev., var. <i>chiapanana</i> , Bates, p. 505.	<i>C. suppletor</i> , Bates, p. 237.
<i>C. sinaloæ</i> , Bates, p. 505.	<i>Dercylus mexicanus</i> , Bates, p. 238.
<i>C. curyscopa</i> , Bates, p. 506.	<i>Dicælus costatus</i> , Lec., var. <i>lerdoensis</i> , Bates, p. 238.
<i>C. sperata</i> , Lec., p. 507.	<i>D. levipennis</i> , Lec. (<i>Flohri</i> , Bates), var. <i>abbreviatus</i> , Bates, p. 239.
<i>C. psilogramma</i> , Bates, p. 507.	<i>Anisotarsus hilariolus</i> , Bates, p. 239.
<i>C. leuconœ</i> , Bates, p. 508.	<i>Harpalus durangoensis</i> , Bates, p. 240.
<i>C. debilis</i> , Bates, p. 509.	<i>H. gravis</i> , Lec., p. 240.
<i>Calosoma ampliator</i> , Bates, <i>antea</i> , in this Paper, p. 223.	<i>Pangus caliginosus</i> , Fabr., p. 241.
<i>C. lugubre</i> , Lec., p. 224.	<i>Cratacanthus dubius</i> , Beauv., p. 241.
<i>C. macrum</i> , Lec., p. 224.	<i>Selenophorus aurocupreus</i> , Bates, p. 241.
<i>C. læve</i> , Dej., var. <i>punctulicolle</i> , Bates, p. 225.	<i>S. tarsalis</i> , Putz., var. <i>liosomus</i> , Bates, p. 242.
<i>C. læve</i> , Dej., var. <i>explanaticolle</i> , Bates, p. 225.	<i>S. bradycelloides</i> , Bates, p. 242.
<i>C. læve</i> , Dej., var. <i>microgonum</i> , Bates, p. 225.	<i>S. dispar</i> , Bates, p. 243.
<i>C. omitemium</i> , Bates, p. 226.	<i>S. crassiusculus</i> , Putz., var. <i>nigrescens</i> , Bates, p. 243.
<i>C. diminutum</i> , Bates, p. 227.	<i>Discoderus dislocatus</i> , Bates, p. 245.
<i>C. morelianum</i> , Bates, p. 228.	<i>Agonoderus pallipes</i> , Fabr., p. 246.
<i>C. porosifrons</i> , Bates, p. 229.	<i>Bradycellus Flohri</i> , var. <i>denigratus</i> , Bates, p. 247.
<i>Scaphinotus macrogonus</i> , Bates, p. 229.	<i>Stenolophus plebejus</i> , Dej., p. 246.
	<i>S. lamprotus</i> , Bates, p. 246.
	<i>Celia californica</i> , Dej., p. 247.

* This species, though not belonging to the Mexican fauna, is included here for convenience.

- Celia hœgei*, var. *civitat*is, Bates, p. 247.
C. tenebrionella, var. *œneicolor*, Bates, p. 248.
C. ciudadensis, Bates, p. 248.
C. rectangular, Lec., p. 249.
Evarthrus substriatus, Lec., p. 249.
Pœcilus chalcites, Say, p. 249.
Euchroa chrysophana, Bates, p. 249.
Loxandrus rubricatus, Bates, p. 250.
Morio cyclomus, Chaud., p. 251.
Calathus gregarius, Say, p. 251.
C. ambiguus, Bates, p. 251.
Pristodactyla impunctata, Say, p. 252.
Anchomenus megillus, Bates, p. 252.
Elliptoleus olithopoides, Bates, p. 252.
Colpodes haptoderoides, Bates, p. 252.
C. harpaloides, Bates, p. 253.
C. steropoides, Bates, p. 254.
C. platysmoides, Bates, p. 254.
C. omaseoides, Bates, p. 255.
C. valens, Bates, p. 255.
C. stenos, Bates, p. 256.
C. tinctipennis, Bates, p. 257.
C. rectilineus, Bates, p. 257.
C. segregatus, Bates, p. 258.
C. trujilloi, Bates, p. 269.
C. œneicauda, Bates, p. 259.
C. acutus, Bates, p. 259.
*Pogonus emaciat*us, Bates, p. 260.
Tachys decastichus, Bates, p. 261.
Pericompsus tabasconus, Bates, p. 261.
Bembidium spherulifer, Bates, p. 261.
Bembidium macrogonum, Bates, p. 262.
B. erosum, Motsch., p. 262.
B. ciudadense, Bates, p. 263.
B. lævigatum, Say, p. 263.
B. Durangoensis, Bates, p. 263.
Anchonoderus fulvipennis, Bates, p. 264.
Lachnophorus cuprellus, Bates, p. 264.
Casnonia sulcicollis, Bates, p. 265.
C. lioptera, Bates, p. 265.
Galerita ovalipennis, Bates, p. 266.
G. lecontei, Dej., p. 266.
Zuphium punctipenne, Bates, p. 267.
Diaphorus rufulus, Lec., p. 267.
Imma planipennis, Bates, p. 267.
Brachinus amplipennis, Bates, p. 268.
B. tabasconus, Bates, p. 268.
B. cognatus, Chaud., var. *cancelatus*, Bates, p. 269.
Coptodera xanthopleura, Bates, p. 270.
Cymindis pilosa, Say, p. 270.
Pinacodera atrata, Chev., var. *ruficornis*, Bates, p. 270.
P. atrata, var. *lævior*, Bates, p. 271.
Apenes hilariola, Bates, p. 271.
A. amplicolis, Bates, p. 271.
Xenodromius Flohri, Bates, p. 272.
Calleida chlorotœnia, Bates, p. 273.
Loxopeza calomicra, Bates, p. 273.
Lebia smithiella, Bates, p. 273.
L. furcata, Lec., p. 274.
Agra pacifica, Bates, p. 274.
A. cyanippe, Bates, p. 275.

EXPLANATION OF PLATES XIII. & XIV.

PLATE XIII.

- FIG. 1. *Calosoma omiltemium*.
 2. ,, *diminutum*.
 3. ,, *porosifrons*.
 4. *Scarites durangoensis*.
 5. *Scaphinotus macrogonus*.
 6. *Pasimachus Smithi*.
 7. *Chlœnius porphyrius*.
 8. ,, *eurybates*.
 9. ,, *beatus*.
 10. *Euchroa chrysohana*.
 11. *Colpodes haptoderoides*.
 12. ,, *harpaloides*.

PLATE XIV.

- FIG. 1. *Colpodes steropoides*.
 2. ,, *platysmoides*.
 3. ,, *omaseoides*.
 4. ,, *valens*.
 5. ,, *rectilineus*.
 6. ,, *segregatus*.
 7. ,, *acutulus*.
 8. *Casnonia sulcicollis*.
 9. *Galerita ovalipennis*.
 10. *Inna planipennis*.
 11. *Apenes hilariola*.
 12. ,, *ampliocollis*.
 13. *Xenodromius Flohri*.
 14. *Calleida chlorotania*.